

<400> 4185
Met Gly Ser Ser Leu Ala Phe Ile Leu Phe Leu Pro
1 5 10

<210> 4186
<211> 8
<212> PRT
<213> Homo sapiens

<400> 4186
Gly Leu Ser Tyr Phe Leu Asp His
1 5

<210> 4187
<211> 99
<212> PRT
<213> Homo sapiens

<400> 4187
Met Arg Leu Gly Arg Trp Gly Leu Arg Met Trp Pro Trp Arg Val Leu
1 5 10 15
Phe Leu Ala Gly Ala Ser Pro Ser Gln Leu Gln Glu Met Gly Cys Arg
20 25 30
Cys Thr Ser Thr Ala Gln Ser Ser Ala Gly Glu Gly Ser Lys Thr Ser
35 40 45
Leu His Pro Asp Pro Arg Val Cys Arg Ser Phe Gln Leu Leu Ala Pro
50 55 60
Trp Arg Met Gly Arg Glu Gly Glu Arg Gly Arg Trp Val Glu Asp Ser
65 70 75 80
Thr Gly Ala Trp Pro His Asp Gly Cys Asn Ala Ala Thr Phe Ser Val
85 90 95
Gly His Val

<210> 4188
<211> 19
<212> PRT
<213> Homo sapiens

<400> 4188
Ala Phe Ile Asn Ser Cys Ile Phe Phe Pro Leu Phe Leu Leu Ala Tyr
1 5 10 15
Tyr Val Tyr

<210> 4189
<211> 20
<212> PRT
<213> Homo sapiens

<400> 4189
Asp Ser Phe Ile Gly Glu Trp Val Val Ala Leu Gly Lys Val Leu Pro
1 5 10 15
Tyr Cys Leu Phe
20

<210> 4190
<211> 42
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4190
Met Lys Gly His Tyr Pro Cys Ala Trp Met Ser Leu Ser Trp Phe Arg
1 5 10 15
Thr Leu Ser Ala Met Ile Tyr Cys Leu Leu Tyr Ile Asp Lys Ser Ser
20 25 30
Ile Xaa Phe Phe Thr Asn Glu Arg Arg Ile
35 40

<210> 4191
<211> 32
<212> PRT
<213> Homo sapiens

<400> 4191
Met Gly Cys Glu Leu Trp Ile Ser Ala Ala Trp Ile Ser Ala Val Trp
1 5 10 15
Cys Ser Asn Arg Leu His Asn Leu Val Glu Ser Gln Ser Ser His Leu
20 25 30

<210> 4192
<211> 19
<212> PRT
<213> Homo sapiens

<400> 4192
Asp Lys Phe Leu Ile Phe Ser Tyr Phe Cys Leu Cys Leu Phe Met Pro
1 5 10 15

Leu Ile Pro

<210> 4193
<211> 26
<212> PRT
<213> Homo sapiens

<400> 4193
Met Pro Trp Tyr Phe Ser Pro Ser Leu Leu Trp Ser Leu Phe Gln Trp
1 5 10 15

Ser Asp Ser Glu Ala Gly Ser Arg Leu Cys
20 25

<210> 4194
<211> 35
<212> PRT
<213> Homo sapiens

<400> 4194
Met Ser Leu Pro Met Ser Phe Phe Ile Leu Ser His Leu Ser Ser Phe
1 5 10 15

Met Ile Cys Thr Tyr Gly Lys Asp Tyr Ser His Phe Thr Asp Glu Gly
20 25 30

Ala Phe Thr
35

<210> 4195
<211> 52
<212> PRT
<213> Homo sapiens

<400> 4195
Met Pro Leu Ala Ile Phe Ala Leu Val Asp Leu Phe Trp Val Ser Ser
1 5 10 15

Phe Ser Asn Ile Asn Val Pro Lys Asp His Leu Val Lys Cys Leu Arg
20 25 30

Phe Arg Val Leu Ser His Pro Glu Arg Ser Gly Leu Asn Arg Ser Arg
35 40 45

Asn Leu His Phe
50

<210> 4196
<211> 38
<212> PRT
<213> Homo sapiens

Table 1. Demographic characteristics of the study population	
Age (years)	65.0 ± 1.5
Gender (male/female)	10/10
Education (years)	12.0 ± 1.0
Occupation (white/blue)	10/10
Marital status (married/divorced/widowed)	10/10/0
Smoking status (smoker/nonsmoker)	10/10
Alcohol consumption (yes/no)	10/10
Comorbidities (hypertension/diabetes/cholesterol)	10/10/10
Medication (antihypertensive/antidiabetic/anticholesterol)	10/10/10
Physical activity (yes/no)	10/10
Stress level (low/moderate/high)	10/10/10
Sleep quality (good/poor)	10/10
Depression score (0-10)	5.0 ± 1.0
Overall health (good/fair/poor)	10/10/10

Phe Asn Lys Phe Ile Leu Ser Cys Asn Asn His His Asp Gln Phe Thr
20 25 30

```
<210> 4197
<211> 20
<212> PRT
<213> Homo sapiens
```

Pro Arg Ser Val
20

```
<210> 4198
<211> 55
<212> PRT
<213> Homo sapiens
```

Leu Gly Trp Ala Trp Leu Gln Ala Ile Cys Leu Val His Val Cys Ser
20 25 30

Pro Ser Trp Pro Trp Lys Asn
50 55

```
<210> 4199
<211> 31
<212> PRT
<213> Homo sapiens
```

Met Val Trp Ala Phe Lys Gly Ile Thr Glu Lys Gly Ile Ser Tyr
20 25 30

<210> 4200
<211> 6
<212> PRT
<213> Homo sapiens

<400> 4200
Ala Gly Ala Val Phe Gly
1 5

<210> 4201
<211> 44
<212> PRT
<213> Homo sapiens

<400> 4201
Met Phe Ser Leu Leu Arg Ala Phe Pro Ser Asp Arg Cys Pro Cys Pro
1 5 10 15
Ala Ala Ser Thr Gly Trp Gln Arg Ala Arg Ala Ser Ala Pro Lys Leu
20 25 30
Ser Cys Arg Ala Leu Arg Pro Arg Val Cys Pro Gln
35 40

<210> 4202
<211> 34
<212> PRT
<213> Homo sapiens

<400> 4202
Met Pro Ser Leu Ile Phe Ile Ile Ser Phe Phe Leu Leu Ala Val Asp
1 5 10 15
Leu Val Cys Pro Ser Phe Ser Cys Ser Leu Arg Cys Ala Gly Asn Leu
20 25 30
Phe Leu

<210> 4203
<211> 74
<212> PRT
<213> Homo sapiens

<400> 4203
Met Arg Ser Ser Leu Trp Ser Ser Ser Ser Leu Leu Ser Leu Met Ala
1 5 10 15
Asn Phe Pro Ala Gln Thr Ser Ala Ser Gly Leu Phe Pro Ser Val His
20 25 30
Thr Asp Phe Phe Pro Ser Pro Val Pro Ser Trp Arg Val Gly Pro Ser
35 40 45
Ala Ala Ala Leu Gly His Ser Gln Asp Lys Val Leu Val Tyr Leu Gly

50

55

60

Glu Gln Ile Thr Ser Ser Ser Ile His Thr
65 70

<210> 4204

<211> 36

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (15)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4204

Met Cys Ile Cys Val Phe Tyr Met Ile Tyr Ile Tyr Leu Tyr Xaa Met
1 5 10 15

Phe Thr Tyr Lys Val Gly Ser Gln Thr Trp Lys Asp Phe Pro Tyr His
20 25 30

Thr Lys Glu Ile
35

<210> 4205

<211> 67

<212> PRT

<213> Homo sapiens

<400> 4205

Met Phe Lys Leu Leu Leu Ser Gly Ala Ser Ala Ile His Cys Val Phe
1 5 10 15

Val Cys Val Trp Cys Ser Val Val His Val Arg Val Cys Val Cys Asp
20 25 30

Val Leu Glu Leu Leu Cys Val Leu Ser Gly Arg Ala Gln Leu His Ser
35 40 45

Leu Gly Asp Lys Gly Glu Asp Thr Asp Gly Arg Arg Arg Ile Thr Gly
50 55 60

Leu His Phe
65

<210> 4206

<211> 17

<212> PRT

<213> Homo sapiens

<400> 4206

Ile Cys Ile Trp Asn Ile Ser Tyr Met Asn Met Tyr Phe Phe Thr Gln
1 5 10 15

2006-04-09 10:00:00

Gln

<210> 4207
<211> 42
<212> PRT
<213> Homo sapiens

<400> 4207
Met Ser Pro Val Leu His Leu Arg Arg Leu Ala Arg Cys Ile Leu Phe
1 5 10 15
His Leu Pro Gln Phe Ser Ser Ser Val Lys Arg Pro His Gly Phe Gly
20 25 30
Ala Asn Arg Met Thr Asp Lys Arg Asp Lys
35 40

<210> 4208
<211> 35
<212> PRT
<213> Homo sapiens

<400> 4208
Met Tyr Leu Leu Ile Asn Lys Leu Tyr Ile Phe Cys Met Phe Thr Gln
1 5 10 15
Thr Val Leu Val Leu Glu Ser Pro His His Leu Asn Phe Val Gly Glu
20 25 30
Phe Cys Lys
35

<210> 4209
<211> 55
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4209
Met Trp Leu Thr Lys Lys Phe Lys Leu Asn Val Arg Leu Thr Phe Cys
1 5 10 15
Phe Tyr Trp Thr Ala Gln Val Glu Lys Val Ser Glu His Lys Thr Pro
20 25 30
Xaa Lys Tyr Ile Phe His Trp Asp Trp Gly Trp Val Leu Trp Gly Lys
35 40 45
Cys Ile Gly Ala Gly Gln Cys
50 55

<210> 4210
 <211> 92
 <212> PRT
 <213> Homo sapiens

<400> 4210
 Met Ser Asp Ala Pro Leu Gly Val Trp Val Leu Leu Gln Ala Val Arg
 1 5 10 15
 Cys Ser Pro Gly Cys Val Gly Thr Ala Pro Asp Ser Pro Met Leu Thr
 20 25 30
 Cys Gly Cys Gly Cys Cys Ser Arg Pro Ser Asp Ala His Leu Gly Val
 35 40 45
 Trp Val Leu Leu Gln Val Val Arg Cys Ser Pro Trp Ala Met Gly Ala
 50 55 60
 Ala Thr Cys Cys Gln Met Leu Thr Ser Gly Cys Gly His Cys Ser Gly
 65 70 75 80
 Leu Ser Asp Ala Arg Leu Trp Leu Trp Ala Leu Leu
 85 90

<210> 4211
 <211> 83
 <212> PRT
 <213> Homo sapiens

<400> 4211
 Pro Leu Gln Ser Ser Pro Trp Arg Leu Leu Phe Arg Gly His Leu Pro
 1 5 10 15
 Val Leu Ser Gly Gly Ser Val Pro Ala Ser Ala Pro Gly Ser His Pro
 20 25 30
 Cys Pro Ala His Glu Gly Ala His Pro Trp Thr Tyr Leu Ser Ser Pro
 35 40 45
 Thr Thr Ser Leu Ala Phe Asn Gly Ser Gly Ile Arg Asp Arg Gly Ala
 50 55 60
 Thr Arg Gln Arg Ala Pro Gly Gly Leu Met Gly Gly Arg Gly Lys Ser
 65 70 75 80
 Arg His Cys

<210> 4212
 <211> 38
 <212> PRT
 <213> Homo sapiens

<400> 4212

Met Cys Val Gly Lys Asp Phe Phe Trp Phe Leu Leu Phe Gly Phe Ala
 1 5 10 15

Gln Ile Leu Glu Ser Val Gly Leu His Leu Leu Pro Asn Leu Lys Ser
 20 25 30

Phe Leu Ser Leu Phe Leu
 35

<210> 4213
 <211> 54
 <212> PRT
 <213> Homo sapiens

<400> 4213
 Met Arg Arg Cys Thr Leu Glu Gly Asn Arg Trp Leu Leu Phe Leu Cys
 1 5 10 15

Val Val Trp Asn Gly Trp Gln Lys Val Ser Glu Leu Cys Gly Arg Gln
 20 25 30

His Gly Ala Lys Gly Thr Val Ser Pro Ser Ser Pro Leu Pro Leu Ser
 35 40 45

Gln Thr Pro Ala Asp Ile
 50

<210> 4214
 <211> 22
 <212> PRT
 <213> Homo sapiens

<400> 4214
 Thr Ser Leu Ile Leu Cys Cys Leu Ser Thr Tyr Leu Leu Ser Leu Tyr
 1 5 10 15

Cys Gly Pro Cys Thr Tyr
 20

<210> 4215
 <211> 41
 <212> PRT
 <213> Homo sapiens

<400> 4215
 Met Asp Ile Leu Phe Phe Phe Leu Phe Tyr Phe Leu Gln Glu Arg Leu
 1 5 10 15

Gly Phe Ser Thr Val Ser Asn Lys Ser Ser Gly Val Ile Phe Phe Pro
 20 25 30

Val Val Leu Pro Gln Pro Pro Glu Ser
 35 40

<210> 4216
 <211> 35
 <212> PRT
 <213> Homo sapiens

<400> 4216
 Met Cys Ile Ala Ile Val His Ser Leu Ser Leu Pro Tyr Gly Thr Pro
 1 5 10 15
 Leu Tyr Glu Pro Ser Ile Tyr Cys Ile Tyr Gly Cys Gly Thr Asn Tyr
 20 25 30
 Pro Lys Thr
 35

<210> 4217
 <211> 71
 <212> PRT
 <213> Homo sapiens

<400> 4217
 Met Asn Trp Arg Ser Cys Lys Leu Gly Ser Val Tyr Tyr Tyr Arg Phe
 1 5 10 15
 Cys Thr Val Ser Pro Arg Val Leu Val Lys Gln Asp Gly Gly Arg Gly
 20 25 30
 Thr Ser Phe Pro Ser Phe Thr Ser Leu Arg Ser Ile Phe Ser Ile Phe
 35 40 45
 Tyr Asn Phe Ala Phe Gly Lys Gly Leu Leu Ile Ser Trp Glu Phe Arg
 50 55 60
 His Ile Leu Lys Ile Ser Pro
 65 70

<210> 4218
 <211> 4
 <212> PRT
 <213> Homo sapiens

<400> 4218
 Met Val Ser Cys
 1

<210> 4219
 <211> 35
 <212> PRT
 <213> Homo sapiens

<400> 4219
 Met Pro Gly Ser Cys Phe Ser Trp Ser Phe Ser Arg Leu Leu Gly Val
 1 5 10 15

Phe Leu Ser Leu Gln Cys Ser Trp Lys Thr Val Tyr Gly Ile Leu Ser
 20 25 30

Arg Glu Ala
 35

<210> 4220
 <211> 31
 <212> PRT
 <213> Homo sapiens

<400> 4220
 Met Gly His Ile Phe Trp Met Cys Ala Leu Lys Leu Ile Leu Leu Ala
 1 5 10 15

Arg Arg Lys Lys Gly Asp Ala Ser Val Ser Asn Ile Leu Asp Thr
 20 25 30

<210> 4221
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 4221
 Met Leu His Phe Tyr Thr Ile Lys Phe Ile Phe Ser Ile Val Cys Leu
 1 5 10 15

Leu Ala Pro Ile Gly Ser Arg
 20

<210> 4222
 <211> 29
 <212> PRT
 <213> Homo sapiens

<400> 4222
 Met Tyr Leu Ile Phe Val Tyr Cys Val Val Leu Phe Phe Val Ser Ala
 1 5 10 15

Leu Thr Gly Val Ala Gly Gly Ala Pro Ser Glu Met His
 20 25

<210> 4223
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 4223
 Met Ile Lys Leu Asn Thr Ser Phe Ser Ile Phe Asn Ala Ala Met Leu
 1 5 10 15

Leu Tyr Leu Trp
 20

<210> 4224
 <211> 35
 <212> PRT
 <213> Homo sapiens

<400> 4224
 Met Asn Asn Pro Gln Ser Pro Gly Leu Ile Leu Phe Thr Trp Leu Ser
 1 5 10 15
 Cys Leu Phe Ala Phe Arg Ser Val Leu Ala Ser Ser Leu Ser Lys Arg
 20 25 30
 Ile Arg Ala
 35

<210> 4225
 <211> 38
 <212> PRT
 <213> Homo sapiens

<400> 4225
 Met His Arg Arg Asp Leu Ser Val Cys Val Cys Leu Cys Leu Cys Pro
 1 5 10 15
 Ser Leu Ser Leu Ser Leu Cys Lys Thr Arg Ile His Cys Cys Arg Glu
 20 25 30
 Leu Pro Gln Ile Ala Pro
 35

<210> 4226
 <211> 68
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (22)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 4226
 Met Trp His Met Met Ser Phe Thr Pro Cys Ser Leu Pro Cys Ser Leu
 1 5 10 15
 Ala Leu Cys Leu Pro Xaa Gly Pro Ala Cys Leu Pro Pro Val Pro Leu
 20 25 30
 Pro Leu Thr Ser Asn Ile Gln Leu Lys Ala Lys Ala Gly Leu Leu Leu
 35 40 45
 Arg Gln Arg Leu Cys Ser Ile Ala Ser Val His Leu Pro Ala Leu Leu
 50 55 60
 Val Ser Ala Arg

<210> 4227
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 4227
 Met Tyr Val Arg Leu Asn Val Thr Tyr Tyr Leu Gly Leu Phe Phe Lys
 1 5 10 15
 Leu Lys Phe Ala Leu Ala Leu Gln Pro Ala Arg Gln Gly Val Ile Thr
 20 25 30

<210> 4228
 <211> 54
 <212> PRT
 <213> Homo sapiens

<400> 4228
 Met Leu Pro Asn Ile Val Leu Pro Ser Trp Cys Leu Val Cys Leu Val
 1 5 10 15
 Gln Phe Ser Phe Thr Phe Leu Ser Pro Ser His Ser Pro Arg Ile Val
 20 25 30
 Thr Thr Gly Leu Tyr Thr Pro Gly Arg His Glu Pro Asn Leu Leu Ser
 35 40 45
 Cys Ser Leu Leu His Leu
 50

<210> 4229
 <211> 6
 <212> PRT
 <213> Homo sapiens

<400> 4229
 Met Arg Thr Arg Leu Trp
 1 5

<210> 4230
 <211> 9
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (6)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 4230

Met Ala Ala Ile Gly Xaa Asn Gly Phe
1 5

<210> 4231

<211> 25

<212> PRT

<213> Homo sapiens

<400> 4231

Met Ala Leu Asn Trp Leu Thr Leu Leu Leu Thr Trp Thr Phe Glu Ser
1 5 10 15

Tyr Val Val Thr Tyr Phe Pro His Leu
20 25

<210> 4232

<211> 23

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (11)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4232

Met Cys Ala Asp Leu Pro Gly Pro Val Gly Xaa Ala Asp Val Gly Pro
1 5 10 15

Gly Ser Tyr Pro Gly Ile Trp
20

<210> 4233

<211> 64

<212> PRT

<213> Homo sapiens

<400> 4233

His Met His Thr Ala Val Ala His Thr Ser Leu Ser Leu Ser Leu Val
1 5 10 15

Thr Val Leu Pro Cys Asp Ser His Pro Ser Asp Arg Pro Cys Ser Leu
20 25 30

Ala Ala Pro Ser Thr Gly Arg Gly Leu Ala Trp Cys Pro Val Ser Val
35 40 45

Cys Leu His Arg Ala Gly Arg Phe His Lys Asp Trp Leu Met Ser Arg
50 55 60

<210> 4234
<211> 5
<212> PRT
<213> Homo sapiens

<400> 4234
Met Ala Leu Pro Thr
1 5

<210> 4235
<211> 32
<212> PRT
<213> Homo sapiens

<400> 4235
Met Gly Ser Pro Gly Ala Leu Leu Ala Leu Leu Pro Ser Leu Leu Pro
1 5 10 15
Phe Ser Trp Gly Leu Gly Pro Trp Pro Leu Leu Ser Ser Pro Lys Thr
20 25 30

<210> 4236
<211> 36
<212> PRT
<213> Homo sapiens

<400> 4236
Met Phe Ile Trp Val Gly Val Ser Leu Cys Leu Met Phe Thr Val Ala
1 5 10 15
Ile Asp Ala Arg Asp Phe Arg Phe Leu Ser Cys Pro Asn Phe Tyr Leu
20 25 30
Pro Phe Asp Phe
35

<210> 4237
<211> 18
<212> PRT
<213> Homo sapiens

<400> 4237
Met Thr Ile Pro Ser Leu Asn Asp Phe Val Cys Arg Ile Leu Leu Leu
1 5 10 15
Leu Asn

[illegible]

```

<210> 4239
<211> 43
<212> PRT
<213> Homo sapiens

<400> 4239
Asn Cys Asn Leu Leu Phe Ala Cys Ile Val Ile Leu Val Tyr Ala Leu
 1             5             10             15
Phe Asp Ile Ser Cys Leu Pro Tyr Leu Tyr Leu Lys Tyr Ser Lys Tyr
          20             25             30
Leu Phe Leu Tyr Ile Phe Gly Lys Asn Ile Phe
      35             40

```

```
<220>  
<221> SITE  
<222> (21)  
<223> Xaa equals any of the naturally occurring L-amino acids
```

<400> 4240
Met Gly Arg Phe Trp Ala Trp His Ile Ile Ala Ser Leu Leu Leu Xaa
1 5 10 15

His Thr Ile Phe Xaa Arg Asn Asn Ser Glu Ser Gln Glu Val Lys Glu
20 25 30

Asn Ala Ile Ser Thr Leu Cys Arg Ile Glu Arg His Leu Thr Asn Arg
35 40 45

Cys Gly Ser Gln Ile Xaa Ile Phe
50 55

<210> 4241
<211> 6
<212> PRT
<213> Homo sapiens

<400> 4241
Trp Met His Thr Gly His
1 5

<210> 4242
<211> 49
<212> PRT
<213> Homo sapiens

<400> 4242
Phe Phe Ala Phe Leu Gly Pro Phe Pro Phe Thr Leu Ile Ser Leu Ser
1 5 10 15
Arg Gly Leu Gln Phe Pro His Asn Arg Phe Asp Arg Arg Lys Ile Leu
20 25 30
Asn Trp Glu Ala His Arg Gly Lys Arg Thr Ala Phe Leu Arg Ile Pro
35 40 45

Val

<210> 4243
<211> 66
<212> PRT
<213> Homo sapiens

<400> 4243
Met Ile Lys Ile Gly Ser Gln Asn Lys Gln Lys Arg Lys Lys Ser Arg
1 5 10 15
Lys Phe Leu Pro Ala Cys Ser Leu Cys Met Leu Leu Cys Asn Val Ile
20 25 30
Leu Leu Leu Ala Pro Ser Arg Asp Gly Ser Pro Glu Ser Glu Leu Asp
35 40 45
His Val Asn Cys Phe Asp His Trp Ser Ile His Lys His Gly Thr Thr
50 55 60

Glu Ala

65

<210> 4244
<211> 30
<212> PRT
<213> Homo sapiens

<400> 4244
Met Trp Cys Met Leu Asp Ile Thr Phe Leu Leu Gly Leu Trp Asn Phe
1 5 10 15

Gly Ile Cys Gln Ala Glu Gly Ile Asn Val Thr Thr Pro Gln
20 25 30

<210> 4245
<211> 67
<212> PRT
<213> Homo sapiens

<400> 4245
Met Trp Arg Gln Lys Thr Leu Tyr Phe Thr Phe Leu Leu Asn Val Ser
1 5 10 15

Phe Ser Leu Tyr Phe Ser Phe Ser Leu Trp Tyr Phe Phe Thr Pro Cys
20 25 30

Pro His Pro His Pro Pro Thr Pro Thr Leu Ala Leu Pro Asn Ala Thr
35 40 45

Lys Ile Val Leu Ile Arg Thr Pro Gly Ser Pro Thr Asn Arg Ser Asp
50 55 60

Thr Ile Asn
65

<210> 4246
<211> 52
<212> PRT
<213> Homo sapiens

<400> 4246
Gly Ala Thr Gly Met Trp Arg Cys Arg Gly Tyr Trp Ala Pro Gly Gln
1 5 10 15

Asn Ala Ile Trp Trp Leu Ala Leu Lys Met Val Leu Cys Cys Ser Cys
20 25 30

Leu Gly Leu Gly Glu Phe Met Arg Pro Ser Met Ser Ser Leu Ser Gly
35 40 45

Ala Val Pro Leu
50

<210> 4247
 <211> 22
 <212> PRT
 <213> Homo sapiens

<400> 4247
 Met Leu Cys Ser Leu Ser Leu Ser Leu Leu Leu Phe Ala Asn Ser Ser
 1 5 10 15
 Thr Leu Asn Pro Lys Ser
 20

<210> 4248
 <211> 33
 <212> PRT
 <213> Homo sapiens

<400> 4248
 Met Pro Val His Ser His Thr Pro Val Glu Arg Leu Val Tyr Leu Thr
 1 5 10 15
 Leu Phe Phe Ser Leu Leu Lys Lys Cys His Leu Thr Asn Ser Ile Thr
 20 25 30
 Ser

<210> 4249
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 4249
 Cys Cys Val Leu Lys Ile Phe Gly Ser
 1 5

<210> 4250
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 4250
 Met Tyr Thr Phe Ala Cys Val His Val Cys Thr Cys Val Cys Leu Cys
 1 5 10 15
 Ala Tyr Leu Ser Val Cys Val His Ile Cys Met Tyr Met Gly Pro Val
 20 25 30
 Ile Ala Ala Arg Leu Leu Pro Arg Ala Phe Ser Ala Arg Trp Pro Cys
 35 40 45
 Leu Cys Ser Phe Cys Gln Pro Arg Gly Ala Glu Trp Pro Ser Ser Gln
 50 55 60
 Pro Gln Trp Ala Gln Trp Gly Gly Pro Ser Ser Glu Gly Thr Arg Ala

Ser Ser Leu Val Ile Ser Phe Asn Asp Ala Glu Ile Leu Val Lys Lys
 35 40 45

Leu Gly Ser Leu Pro
 50

<210> 4254
 <211> 21
 <212> PRT
 <213> Homo sapiens

<400> 4254
 Met Ile Thr Ala Ile Gly Ile Phe Thr Cys Ile Leu Leu Ser Phe Ile
 1 5 10 15
 Ser Pro Met Tyr Ile
 20

<210> 4255
 <211> 37
 <212> PRT
 <213> Homo sapiens

<400> 4255
 Met Tyr Phe Pro Ile Ile Cys Phe Arg Leu Phe Leu Phe Thr Glu Met
 1 5 10 15
 Ile Phe Ser Lys Ile Gly Thr Thr Lys Lys Leu Gln Met Gln Thr Tyr
 20 25 30
 Val Ile Ser Leu Leu
 35

<210> 4256
 <211> 160
 <212> PRT
 <213> Homo sapiens

<400> 4256
 Ala Thr Arg Gly Gly Trp Leu Phe Arg Ala Ile Pro Ala Ser Val Glu
 1 5 10 15
 His Gly Arg Val Tyr Val Gly Asn Val Ala Trp Met His Val Leu Ala
 20 25 30
 Ala Arg Glu Leu Glu Gln Arg Ala Ala Leu Met Gly Gly Gln Val Tyr
 35 40 45
 Phe Cys Tyr Asp Gly Ser Pro Tyr Arg Ser Tyr Glu Asp Phe Asn Met
 50 55 60
 Glu Phe Leu Gly Pro Cys Gly Leu Arg Leu Val Gly Ala Arg Pro Leu
 65 70 75 80

Leu Pro Tyr Trp Leu Leu Val Phe Leu Ala Ala Leu Asn Ala Leu Leu
 85 90 95
 Gln Trp Leu Leu Arg Pro Leu Val Leu Tyr Ala Pro Leu Leu Asn Pro
 100 105 110
 Tyr Thr Leu Ala Val Ala Asn Thr Thr Phe Thr Val Ser Thr Asp Lys
 115 120 125
 Ala Gln Arg His Phe Gly Tyr Glu Pro Leu Phe Ser Trp Glu Asp Ser
 130 135 140
 Arg Thr Arg Thr Ile Leu Trp Val Gln Ala Ala Thr Gly Ser Ala Gln
 145 150 155 160

<210> 4257
 <211> 14
 <212> PRT
 <213> Homo sapiens

<400> 4257
 Met Ala Trp Thr Leu Leu Gly Arg Val Val Gly His His Pro
 1 5 10

<210> 4258
 <211> 1
 <212> PRT
 <213> Homo sapiens

<400> 4258
 Ser
 1

<210> 4259
 <211> 36
 <212> PRT
 <213> Homo sapiens

<400> 4259
 Met Leu Ile Val Tyr Leu Lys Phe Gln Phe Asn Cys Ala Ser Val Phe
 1 5 10 15

Cys Leu Gly Ile Leu Leu Trp Gly Thr Ser Arg Ser Leu Ala Ser Ser
 20 25 30

Trp Ser Met Ser
 35

<210> 4260
 <211> 12

<212> PRT
<213> Homo sapiens

<400> 4260
Met Ile Leu Ala Leu Ile Lys Met Met Thr Phe Ala
1 5 10

<210> 4261
<211> 41
<212> PRT
<213> Homo sapiens

<400> 4261
Met His Leu Cys Trp Ala Gly Ala Leu Ser Phe Val Phe Trp Ala Asn
1 5 10 15
Leu Ile Leu Ile Tyr Leu Phe Gly Thr Ser Glu Ser Pro Gln Asn Ile
20 25 30
Leu Ser Ser Tyr Phe Glu Leu Gly Val
35 40

<210> 4262
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4262
Met Lys Ala Ile Leu Cys Phe Leu Leu Leu Leu Met Asn Pro Phe Pro
1 5 10 15
Pro Phe Ser Phe Pro Ser Pro Ile Asp Gln Lys Cys Glu Gly Gly
20 25 30

<210> 4263
<211> 187
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (140)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (141)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (152)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE
 <222> (175)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (178)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 4263
 Met His Pro Leu Pro Arg Ala Trp Gly Leu Val Val Gly Ser Leu Ala
 1 5 10 15
 Phe Thr Gln Gly Ala Cys Leu Ser His Gly Gly Gln Pro Lys Val Gly
 20 25 30
 Arg Ser Pro Leu Gly Asp Trp Asp Lys Met Pro Ser Phe Gln Arg Asn
 35 40 45
 Val Glu Ala Ser Arg Lys Lys Lys Ala Val Arg Pro Glu Glu Ser Gly
 50 55 60
 Val Leu His Gln Arg Pro Val Pro Ser Gly Gln Pro Leu Arg Trp Ala
 65 70 75 80
 Leu Gly Gly Cys Gly Val Pro Gly Phe His Gln Gly Cys Val Cys Leu
 85 90 95
 Pro Arg Gly Ala Ser Lys Arg Gly Lys Lys Ser Thr Gly Gly Trp Gly
 100 105 110
 Gln Asp Val Arg Leu Ser Gly Gly His Cys Gly Ser Pro Arg Lys Lys
 115 120 125
 Val Thr Arg Leu Lys Arg Lys Leu Gly Ser Ser Xaa Xaa Gly Gln Cys
 130 135 140
 Leu Pro Gly Ser Leu Cys Ala Xaa Ser Arg Gly Ala Arg Thr Gln Phe
 145 150 155 160
 Ala Leu Lys Gly Ala Asp Tyr Asn Leu Ile Gly Arg Arg Phe Xaa Asn
 165 170 175
 Val Xaa Thr Trp Lys Asn Pro Trp Gly Tyr Pro
 180 185

<210> 4264
 <211> 85
 <212> PRT
 <213> Homo sapiens

<400> 4264
 Met Ala Ser Tyr Cys Gly Trp Ile Lys Thr Lys Thr Leu Ala Trp Leu
 1 5 10 15
 Ile Arg Ser Ala Gly Phe Gly Ser Ala Asn Leu Ser Ser Leu Leu Ala
 20 25 30
 Leu Ser Ile Ser Leu Leu Phe Pro Ser Phe Val Thr Gln Val Ser Phe

35

40

45

Leu Lys Met His His Gly Leu Phe Pro Pro Pro Gly Thr Phe Phe Pro
 50 55 60

Pro Phe Pro Leu Thr Cys Gln Phe Leu Leu Ser Phe Ile Ser Leu Leu
 65 70 75 80

Lys Cys His Cys Phe
 85

<210> 4265

<211> 19

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (8)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4265

Met Ile Arg Gln Gln Tyr Asn Xaa His Phe Met Ser Val Ala Val Ser
 1 5 10 15

Thr Phe Ser

<210> 4266

<211> 33

<212> PRT

<213> Homo sapiens

<400> 4266

Met Phe Ser Leu Ser Leu Ile Leu Tyr Phe Val Ser Gln Ile Phe Pro
 1 5 10 15

Gln Phe Ser Trp Leu Asn His Phe Asn Cys Lys Gly Lys Ile Tyr Ile
 20 25 30

Ser

<210> 4267

<211> 91

<212> PRT

<213> Homo sapiens

<400> 4267

Met Val Gly Val Met Leu Gly Val Cys Ser Val Met Gly Leu Pro Trp
 1 5 10 15

Phe Val Ala Ala Thr Val Leu Ser Ile Ser His Val Asn Ser Leu Lys
 20 25 30

Trp Val Cys Val Pro Val Cys Val Cys Gly Ile Leu Val Thr Phe Ala
 20 25 30

Ile Phe Ser Trp Leu Glu Val Arg Gly Pro Ser His Thr Gln Arg Gln
 35 40 45

Glu Leu Met Gln Val
 50

<210> 4270
 <211> 28
 <212> PRT
 <213> Homo sapiens

<400> 4270
 Met Cys Leu Leu Asn Gly Cys Val Cys Lys Ile Lys Met Leu Thr Val
 1 5 10 15

Ala Thr Leu Leu Leu Ser Leu Pro Leu Gly Leu Leu
 20 25

<210> 4271
 <211> 31
 <212> PRT
 <213> Homo sapiens

<400> 4271
 Met Thr Ile Pro Lys Asp Ser Leu Ile Leu Phe Arg Leu Leu Ala Phe
 1 5 10 15

Ile Val Tyr Val Leu Trp Phe Ser Thr Asn Ile His Tyr Pro Gln
 20 25 30

<210> 4272
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 4272
 Met Leu Cys Phe Leu Ile Trp Arg Leu Val Met Trp Val Cys Ser Thr
 1 5 10 15

Cys Lys Lys Met His Arg Ala Gln Asp Lys Cys Ala Phe Pro
 20 25 30

<210> 4273
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 4273
 Met Lys Pro Arg Val Ile Ser Thr Thr Ile Phe Phe Leu Leu Leu Phe
 1 5 10 15

Lys Ser Val Cys Gln Ser Phe Lys Phe Phe Leu Ser Asp Cys Cys His
 20 25 30

<210> 4274
 <211> 36
 <212> PRT
 <213> Homo sapiens

<400> 4274
 Met Leu Leu Met Ala Leu Leu Val Thr Leu Leu Thr Ser Ile Gln Val
 1 5 10 15
 Gly Leu Pro Asp Ala Ile Leu Ser His Pro Glu Ile Thr Ala Val Tyr
 20 25 30
 Ile Asp Leu Val
 35

<210> 4275
 <211> 34
 <212> PRT
 <213> Homo sapiens

<400> 4275
 Met Arg Glu Gly Gln Leu Lys Ala Lys Arg Lys Pro Cys Met Gly Arg
 1 5 10 15
 Leu Cys Phe Trp Ser Tyr Phe Phe Phe Phe Phe Phe Thr Ile His
 20 25 30
 Gly Ile

<210> 4276
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 4276
 Met Leu Phe Pro Leu Phe Phe Ile Leu Ser Ile Phe Ser Val His Ile
 1 5 10 15
 Val Asn Ser Thr Leu Glu Met Glu Lys Gln Ser Gln Arg Val
 20 25 30

<210> 4277
 <211> 62
 <212> PRT
 <213> Homo sapiens

<400> 4277

Met Leu Gln Thr His Pro Leu Leu Ser Gln Leu Pro Ala Pro Gly Pro
 1 5 10 15
 Arg Leu Val Val Ser Leu Ala Phe Leu Leu Tyr Cys Ile Ala Arg Tyr
 20 25 30
 Cys Pro Thr Cys Thr Met Leu Arg Ser Leu Ser Thr Thr Cys Asp Ser
 35 40 45
 Ala Thr Gly Leu Ile Arg Val Leu Arg Cys Val Leu Pro Ser
 50 55 60

<210> 4278

<211> 37

<212> PRT

<213> Homo sapiens

<400> 4278

Ile Leu Gly Phe Pro Gly Cys Trp Gly Gly Ser Leu Ala Leu Pro Val
 1 5 10 15
 Gly Leu Arg Leu Val Gly Gly Gly Gly Gly Gly Ser Arg Cys His Gly
 20 25 30
 Ser Arg Arg Pro Asn
 35

<210> 4279

<211> 55

<212> PRT

<213> Homo sapiens

<400> 4279

Met Cys Val Cys Val Gln Ala Cys Val His Met Cys Leu Cys Val His
 1 5 10 15
 Val Cys Ala Ser Val His Val Cys Glu Cys Ala Tyr Val His Cys Val
 20 25 30
 Arg Glu Cys Ala Cys Gly Pro Cys Thr His Leu Ser Ile His Val Ser
 35 40 45
 Leu His Ala His Val Ser Met
 50 55

<210> 4280

<211> 27

<212> PRT

<213> Homo sapiens

<400> 4280

Met Gly Arg Cys Thr Phe Val Cys Arg Ile Glu Ile Phe Phe Ser Pro
 1 5 10 15

Tyr Leu Ile Pro Pro Glu Phe Gly Asp Tyr Leu
20 25

<210> 4281
<211> 132
<212> PRT
<213> Homo sapiens

<400> 4281
Met Glu Ile Ile His Tyr Ala Ala Leu Ala Gly Ile Thr Leu Leu Thr
1 5 10 15

Leu Leu Phe Ala Ile Gly Ile Tyr Thr Val Leu Pro Pro Gly Trp Asn
20 25 30

Phe Arg Gln Lys Lys Leu Asn Ile Arg Asn Leu Leu Pro His Asn Pro
35 40 45

Pro His Ser Trp Tyr Asn Ser His His Gln Gln Ile Val Ala Pro Pro
50 55 60

Lys Cys Pro Val Phe Ala His Pro Gly Ile Ser His Ser Ser Phe Thr
65 70 75 80

Ala Ser Gln Lys Thr Phe His Gly Pro Thr Gln Asn Ile Pro Pro Ser
85 90 95

Gln His Ser Leu Ile Gly Ser Pro Ile Leu Tyr Phe Lys Gly Ile Tyr
100 105 110

Arg Asn Ser Leu Gln Met Lys Pro Asn Ser Leu Pro Leu His Leu Leu
115 120 125

Ser Val Tyr Leu
130

<210> 4282
<211> 51
<212> PRT
<213> Homo sapiens

<400> 4282
Ile Ile Ser Leu Thr Pro Leu Trp Cys Leu Pro Ser Ala Ile Ala Cys
1 5 10 15

Ser His Ile Leu Ser Phe Gly Phe Pro Pro Glu Ile Pro Asn Phe Pro
20 25 30

Thr Arg Ser Tyr Lys Ala Ile Gln Phe Ser Ser Ala Ser Ile Arg Lys
35 40 45

Leu Ser Phe
50

<210> 4283
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 4283
 Met Leu Met Pro Trp Gly Leu Gly Leu Gly Ile Trp Leu Cys Ser Leu
 1 5 10 15

Thr

<210> 4284
 <211> 54
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (31)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (40)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (48)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 4284
 Met Cys Ala Arg Lys Cys Arg Met Leu Leu Val Leu Gln Thr Val Val
 1 5 10 15

Cys Gly Thr Pro Lys Pro Leu Ser Phe His Asp Ala Phe Cys Xaa Val
 20 25 30

Ile Thr Phe Pro Trp Arg Arg Xaa Gln Pro Trp Trp Arg Ala Leu Xaa
 35 40 45

Trp Leu Cys Pro Ser Ala
 50

<210> 4285
 <211> 34
 <212> PRT
 <213> Homo sapiens

<400> 4285
 Met Ile Val Ile Asn Lys Ile Lys Thr Ile Tyr Leu Phe Leu Val Met
 1 5 10 15

Leu Gln Phe Thr Arg Lys Ile Gln Lys Ile Leu Lys Lys Lys Ile Cys
 20 25 30

Trp Asn

<210> 4286
<211> 34
<212> PRT
<213> Homo sapiens

<400> 4286
Met Leu Met Asn Gln Val Leu Thr Ala Pro Ile Gly Leu Val Leu Leu
1 5 10 15
Leu Leu Phe Ala Leu Leu Thr Phe Pro Pro Ser Ser Ser Ile Arg Glu
20 25 30

Arg Asn

<210> 4287
<211> 27
<212> PRT
<213> Homo sapiens

<400> 4287
Met Thr Ser Tyr Cys Pro Ala Gly Ser Val Pro Arg Leu Ser Leu Pro
1 5 10 15
Ser Thr Val Arg Pro Leu Leu Gly Trp Leu Tyr
20 25

<210> 4288
<211> 41
<212> PRT
<213> Homo sapiens

<400> 4288
Met His Trp Gln Ile Gln Leu Ile Asn Trp Ser Ser Phe Leu Ser Leu
1 5 10 15
Phe Ser Phe Leu Gln Ile Ser Ala Gln Ser Pro Lys Tyr Cys Leu Ser
20 25 30
Gly Pro Ile Met Cys Pro Cys Ile Leu
35 40

<210> 4289
<211> 1
<212> PRT
<213> Homo sapiens

<400> 4289
Met
1

<210> 4290
 <211> 7
 <212> PRT
 <213> Homo sapiens

<400> 4290
 Met Pro Leu Ala Ser Ala Phe
 1 5

<210> 4291
 <211> 37
 <212> PRT
 <213> Homo sapiens

<400> 4291
 Met Leu Phe Gly Ser Leu Cys Asp Leu His Ser Ala Phe Phe Leu Ile
 1 5 10 15
 Ser Ser Thr Ala Cys Pro Thr Leu Ser Phe Leu His Ser Thr Pro Asp
 20 25 30
 Val Phe Gln Asn Leu
 35

<210> 4292
 <211> 5
 <212> PRT
 <213> Homo sapiens

<400> 4292
 Trp Leu Leu Lys Thr
 1 5

<210> 4293
 <211> 12
 <212> PRT
 <213> Homo sapiens

<400> 4293
 Met Ile Leu Phe Thr Met Phe Ile Leu Ala Gly Trp
 1 5 10

<210> 4294
 <211> 30
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4294

Met Xaa His Gly Leu Leu Leu Ile Ser Leu Gln Leu Leu Gly Pro Ile
1 5 10 15

Ile Thr Tyr Thr Thr Ile Ser Asp Pro Thr Thr Phe Leu Leu
20 25 30

<210> 4295

<211> 36

<212> PRT

<213> Homo sapiens

<400> 4295

Leu Pro Ser Leu Leu Leu Phe Leu Asn Pro Phe Ile Phe Thr Ile Leu
1 5 10 15

Leu Leu Phe Pro Cys Gly Gly Phe Asn Thr Ser Ile Phe Phe Leu Asn
20 25 30

Gln Leu Asp Ser
35

<210> 4296

<211> 4

<212> PRT

<213> Homo sapiens

<400> 4296

Met Leu Pro Leu
1

<210> 4297

<211> 37

<212> PRT

<213> Homo sapiens

<400> 4297

Met Gly Leu Leu Val Pro Leu Thr Leu Leu Leu Gln Leu Ser Ala Gly
1 5 10 15

Glu Leu Ser Val Val Leu Gln Asp Ser Thr Asp Cys Met Ser Glu Leu
20 25 30

Gly Leu Ala Trp Leu
35

<210> 4298

<211> 44

<212> PRT

<213> Homo sapiens

00
00
00
07
00
00
00

= 00
00
00
00
00

1

<210> 4301
 <211> 47
 <212> PRT
 <213> Homo sapiens

<400> 4301
 Met Pro Gly Leu Ala Val Thr Ser Pro Thr Trp Val Val Arg Phe Thr
 1 5 10 15
 Asn Asn Pro Val Thr Ala Ala Ser Arg Met Asp His Ala Ala Trp Leu
 20 25 30
 Val Leu Ile Ser Gly Ser Ser Leu Glu Leu Arg Leu Arg Ser Ala
 35 40 45

<210> 4302
 <211> 75
 <212> PRT
 <213> Homo sapiens

<400> 4302
 Met Ser Leu Arg Pro Val Thr Gln Thr Thr Phe Gly Asp Cys Gly Ser
 1 5 10 15
 Val Ser Ser His Arg Gly Lys Lys Pro Met Asn Lys Gln Ala Gln Pro
 20 25 30
 Leu Pro Pro Arg Ser Asp Asp Phe Met Pro Gln Thr Ala Asn Pro His
 35 40 45
 Leu Pro Thr Asp Ala Ser Val Thr Ala Gly Glu Lys Pro Arg Asn Arg
 50 55 60
 Gly Pro Asp Val Glu Thr Glu Pro Phe Arg Ala
 65 70 75

<210> 4303
 <211> 22
 <212> PRT
 <213> Homo sapiens

<400> 4303
 Gly Ile Thr Phe Phe Phe Ile Tyr Phe Gly Phe Cys Phe Ser His Glu
 1 5 10 15
 Gly Leu Phe Ser Asn Ile
 20

<210> 4304
 <211> 50
 <212> PRT
 <213> Homo sapiens

<400> 4304
 Leu Leu Val Asp Phe Asp Ser Asp Lys Arg Thr Gln Pro Ile Trp Val

Met Phe Ile Ala Leu Cys Ser Lys Val Cys Val Cys Val Asn Ala Tyr
 1 5 10 15

Val Cys Val His Thr Tyr Val Val Phe Met Pro Gly Met Tyr Thr Ile
 20 25 30

Trp Val His Ile Cys Asn
 35

<210> 4309
 <211> 31
 <212> PRT
 <213> Homo sapiens

<400> 4309
 Met Arg Ser Leu Gly Leu Arg Cys Ala Phe Tyr Leu Leu Cys Leu Leu
 1 5 10 15

Asn Pro Ser Ala Leu Pro Asp Pro Ala Gly Arg Ser Pro Pro Leu
 20 25 30

<210> 4310
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 4310
 Met Leu Ala Gly Tyr Phe Ala Asp Leu Phe Met Trp Leu Pro His Ser
 1 5 10 15

Val Thr Cys Leu Cys Thr Ser Val Cys Phe Cys Cys Gly Trp
 20 25 30

<210> 4311
 <211> 14
 <212> PRT
 <213> Homo sapiens

<400> 4311
 Met Val Ile Arg Leu Ser Asn Trp Ala Pro Thr Cys Val Ser
 1 5 10

<210> 4312
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 4312
 Met Ala Pro Leu Pro Ser Ser Leu Leu Leu Leu Thr Ile Tyr His
 1 5 10 15

Gly Ser Ser His Leu Pro Ser Thr Met Ile Val Ser Phe Leu Arg Pro
 20 25 30

His Gln Glu Gln Val Pro Ala Pro Cys Phe Leu His Ser Cys Ser Leu
 35 40 45
 Leu Phe Phe Arg Met Ala Thr Ala Asn Ile Val Gln Met Ser Lys Leu
 50 55 60
 Pro Thr Pro Leu Cys Ala Pro Pro Thr Leu Asn Leu Leu Thr Leu Cys
 65 70 75 80
 Ser Arg Cys Lys Leu Thr Cys Pro Phe Cys His Arg Gly Cys Leu Ser
 85 90 95
 Pro Pro Ser Ala Val Thr Leu Leu
 100

<210> 4313
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 4313
 Gln Ala Gln Leu Ile Phe Ser Trp Gly
 1 5

<210> 4314
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 4314
 Met Gly Val Leu Ala Val Leu Leu Pro Val Thr Gly Thr Trp Ala Trp
 1 5 10 15
 Val Arg Gly Gly His Val Ala Pro Asp Thr Ala Leu Arg Ile
 20 25 30

<210> 4315
 <211> 59
 <212> PRT
 <213> Homo sapiens

<400> 4315
 Met Lys Val Lys Leu Pro Phe Val Ser Val Ser Leu Cys Val Cys Asp
 1 5 10 15
 Cys Val Arg Gly Ser Thr Leu Thr Trp Asn Arg Leu Leu Arg Val Gly
 20 25 30
 Glu Gly Ser Gly Arg Tyr Ser Tyr Leu Tyr Arg Arg Lys Ala Gly Trp
 35 40 45
 Gly Cys Gly His Thr Pro Ile Glu Lys Val Val
 50 55

<210> 4316
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 4316
 Met Gly Ala Gly Ala Phe Gly Tyr Leu Ala Leu Pro Cys Leu Val Cys
 1 5 10 15
 Leu Thr Tyr Leu Leu Pro Thr Leu Ser Arg Asn His Ser Gln Met Gly
 20 25 30

<210> 4317
 <211> 34
 <212> PRT
 <213> Homo sapiens

<400> 4317
 Met Ala Leu Glu Ala Gly Ala Leu Tyr Ile Gly Trp Ile Leu Gly Gln
 1 5 10 15
 Ala Phe Phe Phe Phe Phe Phe Ser Glu Val Ser Leu Pro Lys Cys Gly
 20 25 30
 Lys Val

<210> 4318
 <211> 15
 <212> PRT
 <213> Homo sapiens

<400> 4318
 Met His Arg Ser Leu Ser Pro Cys Lys Ile Trp Leu Leu Phe Phe
 1 5 10 15

<210> 4319
 <211> 33
 <212> PRT
 <213> Homo sapiens

<400> 4319
 Met Ser Leu Pro His Leu Leu Phe Ser Ala Phe Met Ser Gln Ala Ala
 1 5 10 15
 Trp Gly Leu Leu Phe Leu Gly Leu Leu His Ser Thr Asn Leu Arg Trp
 20 25 30
 Ala

<210> 4320
 <211> 50
 <212> PRT
 <213> Homo sapiens

<400> 4320
 Met Trp Ser Leu Leu His Phe Cys Leu Leu Leu Ala Ser Phe Leu Ser
 1 5 10 15
 Cys Phe Glu Leu Leu Ala Ser Val Cys Ser Leu Gly Arg Arg Phe Glu
 20 25 30
 Glu Tyr Ser Trp Phe Phe Pro Gly Ser Arg Gly Ser Gly Cys Ala Gly
 35 40 45
 Val Ser
 50

<210> 4321
 <211> 22
 <212> PRT
 <213> Homo sapiens

<400> 4321
 Met Ala Ser Leu Leu Met Phe Leu Val Pro Leu Asn Arg Ile Gly Arg
 1 5 10 15
 Ile Pro His Leu Cys Arg
 20

<210> 4322
 <211> 1
 <212> PRT
 <213> Homo sapiens

<400> 4322
 Met
 1

<210> 4323
 <211> 16
 <212> PRT
 <213> Homo sapiens

<400> 4323
 Ser Trp Cys Asp Gly Gly Cys Trp Cys Arg Leu Met Tyr Ser Phe Val
 1 5 10 15

00
00
00
00
00
00
00
-
00
00
00
00
00

```
<210> 4325
<211> 34
<212> PRT
<213> Homo sapiens
```

```
<210> 4326
<211> 50
<212> PRT
<213> Homo sapiens
```

```
<210> 4327
<211> 34
<212> PRT
<213> Homo sapiens
```

2042

Arg Ser Leu Val Leu Val Leu Ile Gln Gly Leu Ser Pro Val Leu Ser
 20 25 30

Arg Val

<210> 4328
 <211> 39
 <212> PRT
 <213> Homo sapiens

<400> 4328
 Met Phe Ile Leu Leu Ile Met Tyr Leu Ile Trp Glu Gly Lys Ala Val
 1 5 10 15
 Ser Cys Tyr Leu Leu Pro Pro Ile Lys Ala Ser Val Ala Thr Val Leu
 20 25 30
 Thr Phe Asn Pro Trp Lys Phe
 35

<210> 4329
 <211> 181
 <212> PRT
 <213> Homo sapiens

<400> 4329
 Met Asn Arg Arg Val Cys Val Leu Met Leu Leu Val Ala Trp Ile Gly
 1 5 10 15
 Gly Phe Leu His Ser Leu Val Gln Phe Leu Phe Ile Tyr Gln Leu Pro
 20 25 30
 Phe Cys Gly Pro Asn Val Ile Asp Asn Phe Leu Cys Asp Leu Tyr Pro
 35 40 45
 Leu Leu Lys Leu Ala Cys Thr Asn Thr Tyr Val Thr Gly Leu Ser Met
 50 55 60
 Ile Ala Asn Gly Gly Ala Ile Cys Thr Val Thr Phe Phe Pro Leu Leu
 65 70 75 80
 Leu Ser Tyr Gly Val Ile Leu Pro Ser Leu Lys Thr Gln Ser Leu Glu
 85 90 95
 Gly Lys Cys Lys Ala Phe Tyr Thr Cys Ala Ser His Ile Thr Val Ile
 100 105 110
 Thr Leu Phe Phe Val Pro Cys Ile Phe Leu Phe Ala Arg Pro Asn Ser
 115 120 125
 Thr Phe Pro Ile Asp Lys Ser Met Thr Val Val Leu Thr Cys Ile Thr
 130 135 140
 Pro Met Leu Lys Pro Leu Ile Tyr Ala Leu Arg Asn Ala Glu Met Lys
 145 150 155 160

Ser Ala Met Arg Lys Leu Trp Ser Glu Lys Val Ser Leu Ala Gly Lys
165 170 175

Gly Leu Tyr Pro Ser
180

<210> 4330
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4330
Met Gly Trp Gly Leu Leu Cys Thr Phe Leu Tyr Leu Ala Pro Gln Lys
1 5 10 15
Thr Glu Gly Ala Ala Ala Asp Leu Ala Ser Thr Ser Pro Ala Pro
20 25 30

<210> 4331
<211> 30
<212> PRT
<213> Homo sapiens

<400> 4331
Met Leu Asn Leu Cys Ile Thr Leu Leu Phe Leu Ser Val Thr Leu Thr
1 5 10 15
Asn Ile His Ser Asn His Ser Ser Tyr Ser Asn Tyr Leu Leu
20 25 30

<210> 4332
<211> 39
<212> PRT
<213> Homo sapiens

<400> 4332
Met His Pro Leu Leu Phe Tyr Leu Val Lys Leu Phe Leu Glu Ala Arg
1 5 10 15
Asp Thr Thr Cys Ile Ile Met Ser Cys Pro Thr Pro Gly Ile Gln Glu
20 25 30
Ala Leu Lys Ile Thr Cys Ser
35

<210> 4333
<211> 26
<212> PRT
<213> Homo sapiens

<400> 4333
Met Ala Thr Met Phe Thr Lys Ile Thr Thr Ser Ile Val Phe Gly Leu
1 5 10 15

Ser Leu Ala Leu Pro Ile Ser Thr Arg Ala
 20 25

<210> 4334
 <211> 78
 <212> PRT
 <213> Homo sapiens

<400> 4334
 Met Asp Ser Asp Phe Pro Thr Thr Lys Ile Met Met Leu Leu Ala Ser
 1 5 10 15
 Ile Pro Ala Leu Leu Gln Gly Val Val Asn Ile Leu Tyr Arg His Arg
 20 25 30
 Leu Gly Leu Ser Asn Phe Leu Pro Gln Cys Ser Leu Asn Ser Leu Lys
 35 40 45
 Gly Ser Asn Val Gly Pro Asn Leu His Thr Glu Lys Leu Arg Gln Lys
 50 55 60
 Lys Ser Lys Gln Phe Val Pro Cys His Gln Ile Thr Tyr Lys
 65 70 75

<210> 4335
 <211> 6
 <212> PRT
 <213> Homo sapiens

<400> 4335
 Met Phe Ile Phe Phe Phe
 1 5

<210> 4336
 <211> 39
 <212> PRT
 <213> Homo sapiens

<400> 4336
 Met Lys Ser Leu Leu Leu Ala Ile Ala Phe Gln Lys Leu Leu Gly Ser
 1 5 10 15
 Pro His Pro Ile Leu Gln Pro His Leu Phe Ala Ser Leu His Pro Ser
 20 25 30
 Pro Leu Ile Val Gln Gly Ser
 35

<210> 4337
 <211> 32
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (6)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <400> 4337
 Pro Pro Pro Ala Val Xaa Ser Leu Pro Pro Leu Leu Leu Pro Ser Leu
 1 5 10 15
 Leu Pro Pro Gln Gly Ser Gly Ala Ala Ser Pro Ser Pro Thr Pro Trp
 20 25 30

<210> 4338
 <211> 28
 <212> PRT
 <213> Homo sapiens

 <400> 4338
 Met Ser Pro Asn Cys His Leu Leu Glu Thr Arg Pro Ser Ala Ser Leu
 1 5 10 15
 Leu Leu Leu Gly Ile Pro Leu Leu Arg Gly Ala Ser
 20 25

<210> 4339
 <211> 33
 <212> PRT
 <213> Homo sapiens

 <400> 4339
 Met Leu Asn Val Phe Ala Val Pro Val Tyr Val Leu Leu Ile Ile Phe
 1 5 10 15
 Trp Glu Arg Arg Ala Lys Lys Tyr Thr Ala Glu Asn Arg Gln Phe Met
 20 25 30

 Leu

<210> 4340
 <211> 38
 <212> PRT
 <213> Homo sapiens

 <400> 4340
 Met Asn Leu Lys Ile Leu Thr Cys Phe Leu Val Ser Tyr Thr Phe Pro
 1 5 10 15
 Ser Ser Arg Ser Ala Glu Pro Ile Met Leu Lys Ile Ile Ile Ile Lys
 20 25 30

Lys Ser Gly Trp Arg Ser
35

<210> 4341
<211> 39
<212> PRT
<213> Homo sapiens

<400> 4341
Met Ser Glu Ala Gly Trp Trp Ala Trp Leu Phe Val Ile Leu His Pro
1 5 10 15
Phe Gly Met Pro Asp Thr Phe His Asn Asn Phe Lys Lys Asp Lys Thr
20 25 30
Thr Ala Glu Lys Cys Ile Glu
35

<210> 4342
<211> 62
<212> PRT
<213> Homo sapiens

<400> 4342
Met Phe Leu Gln Val Ser Tyr Leu Trp Thr Asp Val Ser Ala Gly Gln
1 5 10 15
Leu Leu Met Trp Leu Cys Arg Trp Pro Thr Thr Val Ala Gly Tyr Phe
20 25 30
Ser Gln Gly Thr Cys Leu Leu Glu Met Tyr Pro Leu Ser Ser Pro Phe
35 40 45
Ser Ser Phe Cys Gln Arg Ile Ala Gly Val Val Glu Glu Ser
50 55 60

<210> 4343
<211> 33
<212> PRT
<213> Homo sapiens

<400> 4343
Met Thr Ala Tyr Leu Leu Val Leu Gln Ala Leu Thr Arg Leu Thr Ala
1 5 10 15
Gln Thr His His Thr Gly Glu His Glu Arg Val Asn Glu Ser Phe Ile
20 25 30
Ile

<210> 4344
<211> 29

0955003-04304

<212> PRT
<213> Homo sapiens

<400> 4344
Met Pro Arg Pro Gly Ser His Leu Ser Trp Trp Arg Leu Trp Leu Ala
1 5 10 15
Pro Arg Pro Pro Ala Leu Leu Leu Arg Asp Ser Arg Thr
20 25

<210> 4345
<211> 9
<212> PRT
<213> Homo sapiens

<400> 4345
Met Val Ile Ile Ile Val Phe Asn Gln
1 5

<210> 4346
<211> 37
<212> PRT
<213> Homo sapiens

<400> 4346
Met Cys Cys Tyr Glu Ala Leu Ala Ser Trp Val Met His Phe Leu Val
1 5 10 15
Phe Ala Leu Pro Arg Ser Leu Ser His Val Ser Phe Ser Leu Gly Phe
20 25 30
Tyr Pro Thr Leu Lys
35

<210> 4347
<211> 13
<212> PRT
<213> Homo sapiens

<400> 4347
Met Leu Ile Phe Tyr Ile Leu Leu Cys Met Val Lys Gly
1 5 10

<210> 4348
<211> 17
<212> PRT
<213> Homo sapiens

<400> 4348
Leu Phe Cys Pro Leu Leu Val Ile Phe Gln Asn Phe Cys Ser Gly Asp
1 5 10 15

Asn

His Ser Ser Ser Arg Arg Gln Asn Leu Asn Ser Asn Leu Ser Gln
 50 55 60

<210> 4355
 <211> 36
 <212> PRT
 <213> Homo sapiens

<400> 4355
 Met Leu Ser Cys Leu Arg His Trp Thr Trp Asn Leu Leu Val Leu Arg
 1 5 10 15
 Pro Leu Ala Ser Met Val Thr Pro Ala Pro His Leu Val Arg Arg Pro
 20 25 30
 Ser Val Ser Asp
 35

<210> 4356
 <211> 55
 <212> PRT
 <213> Homo sapiens
 <400> 4356
 Met Arg Glu Asn Phe Thr Ala Lys Val Trp Leu Ala Ile Pro Phe Leu
 1 5 10 15
 Ala Leu Gly Phe Leu Cys Val Ser Glu Pro Arg Tyr Thr Asp Phe Arg
 20 25 30
 Ser Lys Glu Ser Ser Ser Leu Pro Leu Gly Lys Thr Gly Arg Gly Met
 35 40 45
 Val Leu Tyr Gln Ser His Thr
 50 55

<210> 4357
 <211> 33
 <212> PRT
 <213> Homo sapiens
 <400> 4357
 Met Arg Val Trp Arg Leu Ala Trp Phe Ala Trp Ala Trp Val Gly His
 1 5 10 15
 Gly Thr Ser Cys Thr Gly Val Gln Ser Thr Leu His Ile Val Thr Pro
 20 25 30
 Ser

<210> 4358
 <211> 46

<212> PRT
<213> Homo sapiens

<400> 4358

Met Lys Ile Ser Phe Thr Phe Phe Ile Leu Leu Lys Asn Val Leu
1 5 10 15

Ala Ala Arg Lys Phe Lys Met Ile Asp Val Ala His Ile Met Phe Leu
20 25 30

Cys Asp Arg Leu Leu Trp Ile Lys Ser Arg Gln Thr Met Ala
35 40 45

<210> 4359

<211> 31

<212> PRT

<213> Homo sapiens

<400> 4359

Met Arg Leu Arg Asp Arg Arg Ala Gly Glu Gly Gln Arg Gln Leu Leu
1 5 10 15

Leu Leu Arg Leu Leu Leu Arg Thr Ser Phe Trp Gly Val Val Phe
20 25 30

<210> 4360

<211> 66

<212> PRT

<213> Homo sapiens

<400> 4360

Met Leu Gly Val Ser Ala Ser Gly Ser Leu Gln Leu Leu Gln Ser Gln
1 5 10 15

Arg Gly Leu Glu Arg Gly Pro Ala Pro Arg Gln Pro Ala Asp Thr Ser
20 25 30

Ser Ser Met Cys Glu Ser Leu Val Phe Thr Pro Thr Ala Pro Phe Ser
35 40 45

Gly Gly His Cys Pro Lys Ala Arg His Gly Arg Leu Thr Ser Pro Phe
50 55 60

Tyr Gly
65

<210> 4361

<211> 47

<212> PRT

<213> Homo sapiens

<400> 4361

Met Cys Gly Arg Gln Pro Met Arg Leu Trp Val Ser Phe Ala Val His
1 5 10 15

Cys Thr Arg Pro Val Lys Ala Ala Pro Arg Asn Pro Thr Leu Leu Leu
 20 25 30

Cys Arg Leu Pro Trp Pro Glu Ser Cys His Pro Thr Cys Arg Gln
 35 40 45

<210> 4362
 <211> 49
 <212> PRT
 <213> Homo sapiens

<400> 4362
 Met Thr Trp Pro Phe Phe Tyr Ser Thr Phe Arg Val Trp Ala Leu Ala
 1 5 10 15

Pro Ser Val Ser Ala Leu Leu Thr Gln Cys Val Lys Met Lys Thr Glu
 20 25 30

Pro Ser Phe Pro Ser Ser Ser Val Pro Gln Thr Phe Ser Pro Thr Gln
 35 40 45

Leu

<210> 4363
 <211> 358
 <212> PRT
 <213> Homo sapiens

<400> 4363
 Met Gly Ser Ala Tyr Ala Ile Ile Thr Ala Leu Leu Thr Lys Phe Thr
 1 5 10 15

Lys Leu Cys Glu Phe Pro Met Leu Glu Thr Gly Leu Phe Phe Leu Leu
 20 25 30

Ser Trp Ser Ala Phe Leu Ser Ala Glu Ala Ala Gly Leu Thr Gly Ile
 35 40 45

Val Ala Val Leu Phe Cys Gly Val Thr Gln Ala His Tyr Thr Tyr Asn
 50 55 60

Asn Leu Ser Ser Asp Ser Lys Ile Arg Thr Lys Gln Leu Phe Glu Phe
 65 70 75 80

Met Asn Phe Leu Ala Glu Asn Val Ile Phe Cys Tyr Met Gly Leu Ala
 85 90 95

Leu Phe Thr Phe Gln Asn His Ile Phe Asn Ala Leu Phe Ile Leu Gly
 100 105 110

Ala Phe Leu Ala Ile Phe Val Ala Arg Ala Cys Asn Ile Tyr Pro Leu
 115 120 125

Ser Phe Leu Leu Asn Leu Gly Arg Lys Gln Lys Ile Pro Trp Asn Phe
 130 135 140

Gln His Met Met Met Phe Ser Gly Leu Arg Gly Ala Ile Ala Phe Ala
 145 150 155 160

Leu Ala Ile Arg Asn Thr Glu Ser Gln Pro Lys Gln Met Met Phe Thr
 165 170 175

Thr Thr Leu Leu Leu Val Phe Phe Thr Val Trp Val Phe Gly Gly Gly
 180 185 190

Thr Thr Pro Met Leu Thr Trp Leu Gln Ile Arg Val Gly Val Asp Leu
 195 200 205

Asp Glu Asn Leu Lys Glu Asp Pro Ser Ser Gln His Gln Glu Ala Asn
 210 215 220

Asn Leu Asp Lys Asn Met Thr Lys Ala Glu Ser Ala Arg Leu Phe Arg
 225 230 235 240

Met Trp Tyr Ser Phe Asp His Lys Tyr Leu Lys Pro Ile Leu Thr His
 245 250 255

Ser Gly Pro Pro Leu Thr Thr Thr Leu Pro Glu Trp Cys Gly Pro Ile
 260 265 270

Ser Arg Leu Leu Thr Ser Pro Gln Ala Tyr Gly Glu Gln Leu Lys Glu
 275 280 285

Asp Asp Val Glu Cys Ile Val Asn Gln Asp Glu Leu Ala Ile Asn Tyr
 290 295 300

Gln Glu Gln Ala Ser Ser Pro Cys Ser Pro Pro Ala Arg Leu Gly Leu
 305 310 315 320

Asp Gln Lys Ala Ser Pro Gln Thr Pro Gly Lys Glu Asn Ile Tyr Glu
 325 330 335

Gly Asp Leu Gly Leu Gly Gly Tyr Glu Leu Lys Leu Glu Gln Thr Leu
 340 345 350

Gly Gln Ser Gln Leu Asn
 355

<210> 4364
 <211> 37
 <212> PRT
 <213> Homo sapiens

<400> 4364
 Met Gly Leu Pro Val Ser Trp Ala Pro Pro Ala Leu Trp Val Leu Gly
 1 5 10 15

Cys Cys Ala Leu Leu Leu Ser Leu Trp Ala Leu Cys Thr Ala Cys Arg
 20 25 30

Arg Pro Arg Thr Leu
 35

2058

<211> 71
<212> PRT
<213> Homo sapiens

<400> 4374
Met Thr Glu Glu Arg Gly Val Trp Ala Val Leu Leu Leu Arg Ser Leu
1 5 10 15
Ala Pro Ser Leu Ser Cys Leu Thr Val Cys Cys Ser Ser Trp Leu Leu
20 25 30
Trp Cys Pro Leu Asn Ser Cys Val Thr Cys Pro Gly Leu Ser Leu Ser
35 40 45
Leu Leu Arg Gln Gly Ala Ala Gly Cys Phe Leu Thr Cys Thr Gly Met
50 55 60
Pro Gln Ser Thr Trp Pro Gly
65 70

<210> 4375
<211> 37
<212> PRT
<213> Homo sapiens

<400> 4375
Met Phe Tyr Leu Met Trp Trp Gln Phe Ile Gln Gly Val Met Phe Ser
1 5 10 15
Gln His Leu Asp Thr Gln Gly Asn Phe Leu Phe Trp Gly Asp Ser Ala
20 25 30
Pro Ser Gly Trp Arg
35

<210> 4376
<211> 67
<212> PRT
<213> Homo sapiens

<400> 4376
Glu Gln Val Glu Glu Ser Leu Gln Asp Glu Asp Asp Asn Asp Val Tyr
1 5 10 15
Ile Leu Thr Lys Val Ser Asp Ile Leu His Ser Ile Phe Ser Ser Tyr
20 25 30
Lys Glu Lys Val Leu Pro Trp Phe Glu Gln Leu Leu Pro Leu Ile Val
35 40 45
Asn Leu Ile Cys Pro His Arg Pro Trp Ala Arg Gln Thr Met Gly Val
50 55 60
Met His Leu
65

項目	単位	数値	単位	数値
1. 総人口	人	1,234,567	2. 男性人口	612,345
3. 女性人口	人	622,222	4. 0歳人口	15,678
5. 1歳人口	人	14,567	6. 2歳人口	13,456
7. 3歳人口	人	12,345	8. 4歳人口	11,234
9. 5歳人口	人	10,123	10. 6歳人口	9,012
11. 7歳人口	人	8,901	12. 8歳人口	7,890
13. 9歳人口	人	6,789	14. 10歳人口	5,678
15. 11歳人口	人	4,567	16. 12歳人口	3,456
17. 13歳人口	人	2,345	18. 14歳人口	1,234
19. 15歳人口	人	1,123	20. 16歳人口	1,012
21. 17歳人口	人	901	22. 18歳人口	890
23. 19歳人口	人	789	24. 20歳人口	678
25. 21歳人口	人	567	26. 22歳人口	456
27. 23歳人口	人	345	28. 24歳人口	234
29. 25歳人口	人	123	30. 26歳人口	112
31. 27歳人口	人	101	32. 28歳人口	90
33. 29歳人口	人	89	34. 30歳人口	78
35. 31歳人口	人	67	36. 32歳人口	56
37. 33歳人口	人	45	38. 34歳人口	34
39. 35歳人口	人	23	40. 36歳人口	12
41. 37歳人口	人	11	42. 38歳人口	10
43. 39歳人口	人	9	44. 40歳人口	8
45. 41歳人口	人	7	46. 42歳人口	6
47. 43歳人口	人	5	48. 44歳人口	4
49. 45歳人口	人	3	50. 46歳人口	2
51. 47歳人口	人	1	52. 48歳人口	1
53. 49歳人口	人	1	54. 50歳人口	1
55. 51歳人口	人	1	56. 52歳人口	1
57. 53歳人口	人	1	58. 54歳人口	1
59. 55歳人口	人	1	60. 56歳人口	1
61. 57歳人口	人	1	62. 58歳人口	1
63. 59歳人口	人	1	64. 60歳人口	1
65. 61歳人口	人	1	66. 62歳人口	1
67. 63歳人口	人	1	68. 64歳人口	1
69. 65歳人口	人	1	70. 66歳人口	1
71. 67歳人口	人	1	72. 68歳人口	1
73. 69歳人口	人	1	74. 70歳人口	1
75. 71歳人口	人	1	76. 72歳人口	1
77. 73歳人口	人	1	78. 74歳人口	1
79. 75歳人口	人	1	80. 76歳人口	1
81. 77歳人口	人	1	82. 78歳人口	1
83. 79歳人口	人	1	84. 80歳人口	1
85. 81歳人口	人	1	86. 82歳人口	1
87. 83歳人口	人	1	88. 84歳人口	1
89. 85歳人口	人	1	90. 86歳人口	1
91. 87歳人口	人	1	92. 88歳人口	1
93. 89歳人口	人	1	94. 90歳人口	1
95. 91歳人口	人	1	96. 92歳人口	1
97. 93歳人口	人	1	98. 94歳人口	1
99. 95歳人口	人	1	100. 96歳人口	1
101. 97歳人口	人	1	102. 98歳人口	1
103. 99歳人口	人	1	104. 100歳人口	1
105. 101歳人口	人	1	106. 102歳人口	1
107. 103歳人口	人	1	108. 104歳人口	1
109. 105歳人口	人	1	110. 106歳人口	1
111. 107歳人口	人	1	112. 108歳人口	1
113. 109歳人口	人	1	114. 110歳人口	1
115. 111歳人口	人	1	116. 112歳人口	1
117. 113歳人口	人	1	118. 114歳人口	1
119. 115歳人口	人	1	120. 116歳人口	1
121. 117歳人口	人	1	122. 118歳人口	1
123. 119歳人口	人	1	124. 120歳人口	1
125. 121歳人口	人	1	126. 122歳人口	1
127. 123歳人口	人	1	128. 124歳人口	1
129. 125歳人口	人	1	130. 126歳人口	1
131. 127歳人口	人	1	132. 128歳人口	1
133. 129歳人口	人	1	134. 130歳人口	1
135. 131歳人口	人	1	136. 132歳人口	1
137. 133歳人口	人	1	138. 134歳人口	1
139. 135歳人口	人	1	140. 136歳人口	1
141. 137歳人口	人	1	142. 138歳人口	1
143. 139歳人口	人	1	144. 140歳人口	1
145. 141歳人口	人	1	146. 142歳人口	1
147. 143歳人口	人	1	148. 144歳人口	1
149. 145歳人口	人	1	150. 146歳人口	1
151. 147歳人口	人	1	152. 148歳人口	1
153. 149歳人口	人	1	154. 1	

Val Ile Cys His Ser Ser Pro Leu Leu Phe Val Leu His Phe Leu Leu
20 25 30

<213> Homo sapiens

Asn Lys Leu Tyr Glu Phe Leu Leu Ile Glu Ser Met
85 90

<213> Homo sapiens

1

<213> Homo sapiens

Met Lys Gln Lys Lys Ile Ile Leu Leu Phe Asn Met Ala
1 5 10

<210> 4387
<211> 33
<212> PRT
<213> Homo sapiens

<400> 4387
Cys Val Leu Ser Gln Phe Phe His Phe Pro Ala Cys Phe Leu Met Ser
1 5 10 15
Ala Phe Gly Pro Ile Ile Val Ser Gln His His Gln His Val Asp Lys
20 25 30

Lys

<210> 4388
<211> 14
<212> PRT
<213> Homo sapiens

<400> 4388
Met Glu Ala Ile Phe Thr Phe Thr Val Leu Asn Gly Lys Ile
1 5 10

<210> 4389
<211> 5
<212> PRT
<213> Homo sapiens

<400> 4389
Met Trp Leu Ala Cys
1 5

<210> 4390
<211> 11
<212> PRT
<213> Homo sapiens

<400> 4390
Met His Val Leu Pro Pro His Phe Cys Ser Ala
1 5 10

<210> 4391
<211> 10
<212> PRT
<213> Homo sapiens

<400> 4391
Asp Arg Tyr Phe Val Leu Ile Gln Met Gln
1 5 10

<210> 4392
 <211> 36
 <212> PRT
 <213> Homo sapiens

<400> 4392
 Met Cys His Pro Leu Thr Gly Glu Ser Gly Gly Val Val Gly Val Asn
 1 5 10 15
 Val Leu Lys Ile Tyr Val Ser Cys Ile Leu Phe Glu Ser Ala Val Phe
 20 25 30
 Ser Gln Gln Leu
 35

<210> 4393
 <211> 47
 <212> PRT
 <213> Homo sapiens

<400> 4393
 Met Phe Trp Met Ser Leu Trp Val Ser Phe Ile Ile Met Leu His Asn
 1 5 10 15
 Leu Tyr Thr Gly Tyr His Phe Arg Val Leu Lys Gly Asp Thr Ser Tyr
 20 25 30
 Lys Glu Lys Asp Ala Cys Phe His Phe Leu Lys Lys Lys Lys Lys
 35 40 45

<210> 4394
 <211> 33
 <212> PRT
 <213> Homo sapiens

<400> 4394
 Met Cys Phe Cys Leu Lys Ser Ile Asn Ile Trp Phe His Leu His Ser
 1 5 10 15
 Asn Thr Trp Ile Gly Phe Ile Leu Phe Leu Leu Ala Phe Trp Ile Gln
 20 25 30
 Asn

<210> 4395
 <211> 57
 <212> PRT
 <213> Homo sapiens

<400> 4395
 Met Asp Ser Ser Ala Ala Val Leu Gly Val Leu Leu Lys Thr Leu Leu
 1 5 10 15
 Leu Leu Trp Ser Cys Leu Leu Phe Pro Ser Gln Leu Val Lys Pro Pro

30

Ala Ser Pro Ala Leu His Ala Cys Ser
50 55

```
<210> 4396
<211> 17
<212> PRT
<213> Homo sapiens
```

<400> 4396
Met Ser Tyr Ile Leu Asp Thr Phe Ser Leu Leu Leu Phe Leu Leu Tyr
1 5 10 15

Phe

```
<210> 4397
<211> 39
<212> PRT
<213> Homo sapiens
```

<400> 4397
Glu Gly Leu Gly Ala Ser Trp Leu Trp His Leu Thr Ser Trp Ala Ser
1 5 10 15

Thr Ser Cys Ser Gln Asp Pro Cys Gly Asp Glu Arg Gly Ala Trp Lys
20 25 30

Gly Leu Arg Pro Ser Thr Ala
35

```
<210> 4398
<211> 35
<212> PRT
<213> Homo sapiens
```

<400> 4398
Met Ala Gln Val Leu Ser Trp Cys Ala Lys Glu Thr Trp Leu Leu Leu
1 5 10 15

Gly Ile Ala Leu Arg Ser Ser Leu Ser Cys Pro Gln Pro Asn Trp Trp
20 25 30

Ala Pro Cys
35

```
<210> 4399
<211> 28
<212> PRT
```

<213> Homo sapiens

<400> 4399

Gly Asn Pro Lys Lys Leu Trp Arg Arg Met Val Leu Leu Leu Thr Arg
1 5 10 15

Gln Thr Tyr Leu Pro Leu Ala Leu Leu Cys Gly Lys
20 25

<210> 4400

<211> 19

<212> PRT

<213> Homo sapiens

<400> 4400

Met Val Thr Val Val Gln Thr Leu Leu Leu Leu Thr Gln Asn Arg Ser
1 5 10 15

Gly Ala Met

<210> 4401

<211> 72

<212> PRT

<213> Homo sapiens

<400> 4401

Met Pro Leu Gly Arg Leu Leu Pro Arg Leu Leu Phe Phe Leu Ile Val
1 5 10 15

Thr Tyr Arg Leu Gly Val Leu Gly Thr Glu Ser Ser Gln Leu Leu Gln
20 25 30

Tyr Glu Glu Thr Val His Leu Phe Cys His Leu Asp Leu Phe Ala Thr
35 40 45

His Leu Leu Tyr Phe Leu Tyr Trp Lys Ile Phe Leu Leu Val Leu Ser
50 55 60

Tyr Glu Phe Leu Phe Cys Phe Asn
65 70

<210> 4402

<211> 26

<212> PRT

<213> Homo sapiens

<400> 4402

Leu Trp Trp Leu Tyr Ile Val Ser Val Ala Ile Ile Gln Leu Cys Cys
1 5 10 15

Ser Ser Ala Asn Ala Asp Ile Asp Asn Met
20 25

163159 00000000

<210> 4407
<211> 33
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4407
Met Ser Xaa Ser Xaa Gly Thr Ser Val Xaa Phe Leu Arg Thr Arg Phe
1 5 10 15
Ser Leu Cys Ile Cys Gly Arg Asn Thr Pro Glu Val Met Leu Cys Tyr
20 25 30

Ser

<210> 4408
<211> 30
<212> PRT
<213> Homo sapiens

<400> 4408
Met Phe Trp Cys Glu Phe Thr Ala Ser Phe Leu Leu Phe Leu Asn Ala
1 5 10 15
Ile Ser Gly Leu His Ile Asn Ser Ile Thr His Pro Trp Glu
20 25 30

<210> 4409
<211> 17
<212> PRT
<213> Homo sapiens

<400> 4409
Met Ser Ser Leu Leu Leu Ile Ile Ile Leu Ala Leu Ser Leu Ala Tyr
1 5 10 15

Glu

<210> 4410
 <211> 6
 <212> PRT
 <213> Homo sapiens

<400> 4410
 Leu Pro Gly Pro Cys Leu
 1 5

<210> 4411
 <211> 66
 <212> PRT
 <213> Homo sapiens

<400> 4411
 Met Thr Leu Val Gly Lys Thr Arg Leu Ser Arg Pro Gly Gln Gly Ala
 1 5 10 15
 Phe Gly Cys Phe Cys Cys Pro Trp Leu Cys Ser Ala Leu Trp Glu Ala
 20 25 30
 Pro Gly Arg Pro Asn Val Gln Asp His Arg Gly Glu Ser Glu Leu Asp
 35 40 45
 Arg Lys Arg Thr Thr Ala Cys Val Gly Pro Leu Pro Thr Ile Lys Ile
 50 55 60
 Ala Pro
 65

<210> 4412
 <211> 180
 <212> PRT
 <213> Homo sapiens

<400> 4412
 Met Cys Tyr Gly Arg Cys Ala Arg Cys Ile Gly His Ser Leu Val Trp
 1 5 10 15
 Leu Ala Ile Leu Cys Ile Val Ala Asn Ile Leu Leu Tyr Phe Pro Asn
 20 25 30
 Gly Glu Thr Lys Tyr Ala Ser Glu Asn His Leu Ser Arg Phe Val Trp
 35 40 45
 Phe Phe Ser Gly Ile Val Gly Gly Gly Leu Leu Val Phe Leu Pro Ala
 50 55 60
 Phe Val Phe Ile Gly Leu Glu Lys Asp Asp Cys Cys Gly Cys Cys Gly
 65 70 75 80
 His Glu Asp Cys Gly Lys Arg Cys Ala Met Phe Ser Ser Val Leu Pro
 85 90 95
 Ala Ala Ile Gly Val Ala Gly Ser Gly Tyr Cys Val Ser Trp Gln Pro
 100 105 110

Trp Ala Trp Arg Lys Asp His Tyr Val Leu Ile Leu Arg Ala Ser Gly
115 120 125

Thr Thr Pro Leu Pro Thr Pro Met Asp Ser Thr Phe Trp Ile Pro Pro
130 135 140

His Gly Pro Ser Ala Leu Asn Pro His Met Leu Leu Asn Gly Ile Ser
145 150 155 160

Leu Cys Phe Leu Ser Phe Trp Pro Ser Val Glu Leu Asn Ser Ser Cys
165 170 175

Val Ser Phe Lys
180

<210> 4413
<211> 41
<212> PRT
<213> Homo sapiens

<400> 4413
Met Cys Leu Ile Gln Gly Met Tyr Leu Ile Thr His Phe Cys Thr Cys
1 5 10 15

Thr Leu Val Trp Phe Cys Asn Leu Gln Phe Ser Asn Gln Ser Phe Ile
20 25 30

Val Thr Phe Ser Leu Pro Val Ser Leu
35 40

<210> 4414
<211> 34
<212> PRT
<213> Homo sapiens

<400> 4414
Met Ser Gly Leu Cys Glu Ser Arg Arg Glu Val Phe Gln Ile Met His
1 5 10 15

Met Asp Val Glu Leu Leu Arg Leu Leu Glu Leu Trp Met Ala Val Leu
20 25 30

Phe Arg

<210> 4415
<211> 152
<212> PRT
<213> Homo sapiens

<400> 4415
Met Glu Phe Leu Gly Pro Cys Gly Leu Arg Leu Val Glu Ser Arg Leu
1 5 10 15

Phe Gly Gly Arg Glu Lys Glu Thr Arg Gln Lys Arg Asn Cys Arg Met
 20 25 30

Arg Lys Glu Arg Gly Glu Lys Ser Ser Arg Arg Asn Leu Lys
 35 40 45

<210> 4418
 <211> 29
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (17)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 4418
 Met Met Asn Thr Leu Ser Gly Ser Gly Gly Cys Trp Ser His Cys Ala
 1 5 10 15

Xaa His His Trp His Cys His Pro His Glu Trp Gln Val
 20 25

<210> 4419
 <211> 51
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (7)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (9)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (13)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 4419
 Met Ile Ile Tyr Tyr Cys Xaa Leu Xaa Ser Ser Ser Xaa Phe Tyr Ala
 1 5 10 15

Thr Val Lys Leu Met Asn Arg Val Val Phe Gly Asn Gly Asn Thr Phe
 20 25 30

Val Thr Asp Leu Tyr Thr Val Tyr Ser Ile Gly Lys Met Gly Gly Gly
 35 40 45

Phe Leu Ile
 50

<210> 4420
 <211> 114
 <212> PRT
 <213> Homo sapiens

<400> 4420
 Leu Gly Arg Leu Leu Leu Arg Gly Pro Arg Cys Leu Leu Ser Pro Ala
 1 5 10 15
 Thr Pro Thr Leu Val Pro Pro Val Arg Gly Met Lys Lys Gly Phe Arg
 20 25 30
 Ala Ala Phe Arg Phe Gln Lys Glu Leu Glu Arg Trp Arg Leu Leu Arg
 35 40 45
 Cys Pro Pro Pro Pro Val Arg Arg Ser Glu Lys Pro Asn Trp Asp Tyr
 50 55 60
 His Ala Glu Ile Gln Ala Phe Gly His Arg Leu Gln Glu Thr Phe Ser
 65 70 75 80
 Leu Asp Leu Leu Lys Thr Ala Phe Val Asn Thr Cys Tyr Ile Lys Ser
 85 90 95
 Glu Glu Ala Asn Ala Lys Pro Trp Asn Arg Glu Arg Ser Cys Ser Ser
 100 105 110
 Glu Ser

<210> 4421
 <211> 37
 <212> PRT
 <213> Homo sapiens

<400> 4421
 Met Pro Leu Arg Ser Phe Gln Gln Val Ile Leu Ile Ala Val Gly Val
 1 5 10 15
 Phe Leu Ser Leu Ala Ala Leu Ala Gly Gly Cys Tyr Phe Leu Val Leu
 20 25 30
 Arg Tyr Lys Gly Trp
 35

<210> 4422
 <211> 37
 <212> PRT
 <213> Homo sapiens

<400> 4422
 Met Gly Leu Ser Ala Gln Gln Gly Ala Cys Phe Leu Leu Ser Leu Cys
 1 5 10 15
 Leu Pro Leu Cys Leu Leu Val Ile Ser Leu Cys Gln Ile Asn Lys Phe
 20 25 30

Phe Lys Asn Lys Asn
35

<210> 4423
<211> 206
<212> PRT
<213> Homo sapiens

<400> 4423
Met Thr Ala Gly Trp Leu Val Ile Ala Val Gly Leu Val Arg Ala Tyr
1 5 10 15
Leu Ala Lys Gly Ser Tyr His Ser Leu Tyr Tyr Ser Ile Glu Lys Pro
20 25 30
Leu Lys Phe Phe Gln Thr Gly Ala Leu Leu Glu Ile Leu His Cys Ala
35 40 45
Ile Gly Ile Val Pro Ser Ser Val Val Leu Thr Ser Phe Gln Val Met
50 55 60
Ser Arg Val Phe Leu Ile Trp Ala Val Thr His Ser Val Lys Glu Val
65 70 75 80
Gln Ser Glu Asp Ser Val Leu Leu Phe Val Ile Ala Trp Thr Ile Thr
85 90 95
Glu Ile Ile Arg Tyr Ser Phe Tyr Thr Phe Ser Leu Leu Asn His Leu
100 105 110
Pro Tyr Leu Ile Lys Trp Ala Arg Tyr Thr Leu Phe Ile Val Leu Tyr
115 120 125
Pro Met Gly Val Ser Gly Glu Leu Leu Thr Ile Tyr Ala Ala Leu Pro
130 135 140
Phe Val Arg Gln Ala Gly Leu Tyr Ser Ile Ser Leu Pro Asn Lys Tyr
145 150 155 160
Asn Phe Ser Phe Asp Tyr Tyr Ala Phe Leu Ile Leu Ile Met Ile Ser
165 170 175
Tyr Ile Pro Ile Phe Pro Gln Leu Tyr Phe His Met Ile His Gln Arg
180 185 190
Arg Lys Ile Leu Ser His Thr Glu Glu His Lys Lys Phe Glu
195 200 205

<210> 4424
<211> 35
<212> PRT
<213> Homo sapiens

<400> 4424
Met Ser Gly Thr Thr Ser Gly Leu Gln Leu Cys Leu Val Ile Met Met
1 5 10 15

Asn Cys Val Cys Val Thr Leu Lys Asp Ser Val Cys Gln Val Lys Lys
20 25 30

Asn Asp Val
35

<210> 4425
<211> 25
<212> PRT
<213> Homo sapiens

<400> 4425
Met Glu Leu Ser Arg Leu Trp His Val Gly Phe Val Phe Leu Phe Ser
1 5 10 15
Phe Asp Tyr Val Arg Ala Ile Ser Leu
20 25

<210> 4426
<211> 37
<212> PRT
<213> Homo sapiens

<400> 4426
Met Phe Cys Val Ser Leu Cys Val Cys Val Cys Val Cys Val Arg Val
1 5 10 15
Leu Thr Trp Cys Ser Asp Ala Gln His His Asn Arg Pro Pro Phe Ser
20 25 30

Ser Thr Val Gly Glu
35

<210> 4427
<211> 26
<212> PRT
<213> Homo sapiens

<400> 4427
Met Leu Pro Glu Cys Leu Leu Cys Cys Val Val Val Gly Met Leu Leu
1 5 10 15
His Leu Ser Val Pro Gln Phe Pro Gln Leu
20 25

<210> 4428
<211> 211
<212> PRT
<213> Homo sapiens

<400> 4428
Met Ala Asn Ser Gly Leu Gln Leu Leu Gly Phe Ser Met Ala Leu Leu

1	5	10	15
Gly Trp Val Gly Leu Val Ala Cys Thr Ala Ile Pro Gln Trp Gln Met	20	25	30
Ser Ser Tyr Ala Gly Asp Asn Ile Ile Thr Ala Gln Ala Met Tyr Lys	35	40	45
Gly Leu Trp Met Asp Cys Val Thr Gln Ser Thr Gly Met Met Ser Cys	50	55	60
Lys Met Tyr Asp Ser Val Leu Ala Leu Ser Ala Ala Leu Gln Ala Thr	65	70	75
Arg Ala Leu Met Val Val Ser Leu Val Leu Gly Phe Leu Ala Met Phe	85	90	95
Val Ala Thr Met Gly Met Lys Cys Thr Arg Cys Gly Gly Asp Asp Lys	100	105	110
Val Lys Lys Ala Arg Ile Ala Met Gly Gly Gly Ile Ile Phe Ile Val	115	120	125
Ala Gly Leu Ala Ala Leu Val Ala Cys Ser Trp Tyr Gly His Gln Ile	130	135	140
Val Thr Asp Phe Tyr Asn Pro Leu Ile Pro Thr Asn Ile Lys Tyr Glu	145	150	155
Phe Gly Pro Ala Ile Phe Ile Gly Trp Ala Gly Ser Ala Leu Val Ile	165	170	175
Leu Gly Gly Ala Leu Leu Ser Cys Ser Cys Pro Gly Asn Glu Ser Lys	180	185	190
Ala Gly Tyr Arg Ala Pro Arg Ser Tyr Pro Lys Ser Asn Ser Ser Lys	195	200	205
Glu Tyr Val	210		

<210> 4429
 <211> 19
 <212> PRT
 <213> Homo sapiens

<400> 4429
 Met Ser Phe Thr Ala His Ser Gly Trp Trp Val Ser Leu Leu Phe Trp
 1 5 10 15
 Val Leu Asp

<210> 4430
 <211> 63
 <212> PRT
 <213> Homo sapiens

50

55

60

Cys Tyr Leu
65

<210> 4449
<211> 85
<212> PRT
<213> Homo sapiens

<400> 4449
Met Glu Lys Leu Val Leu Val Leu Ala Asn Leu Phe Gly Arg Lys Tyr
1 5 10 15
Ile Pro Ala Lys Phe Gln Asn Ala Asn Leu Ser Phe Ser Gln Ser Lys
20 25 30
Val Ile Leu Ala Glu Leu Pro Glu Asp Phe Lys Ala Ala Leu Tyr Glu
35 40 45
Tyr Asn Leu Ala Val Met Lys Asp Phe Ala Ser Phe Leu Leu Ile Ala
50 55 60
Ser Lys Ser Val Asn Met Lys Lys Glu His Gln Leu Pro Leu Val Lys
65 70 75 80
Asn Gln Ile His Arg
85

<210> 4450
<211> 15
<212> PRT
<213> Homo sapiens

<400> 4450
Met Lys Leu Glu Val Ala Pro Val Phe Cys Trp Ser Cys Cys Ala
1 5 10 15

<210> 4451
<211> 8
<212> PRT
<213> Homo sapiens

<400> 4451
Tyr Pro Ala Phe Ile Gly Asn Phe
1 5

<210> 4452
<211> 26
<212> PRT
<213> Homo sapiens

<400> 4452

<211> 18
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (9)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 4460
 Met Ile Leu Leu Leu Leu Arg Leu Xaa Cys Ile Leu Lys Gln Leu Ala
 1 5 10 15

Phe Phe

<210> 4461
 <211> 61
 <212> PRT
 <213> Homo sapiens

<400> 4461
 Met Leu Cys Ala Met Leu Ala Cys Gly Gly Leu Cys Asn Ala Leu Thr
 1 5 10 15

Cys Met Glu Glu Ala Arg Leu Arg Ala Glu Met Trp Pro Glu Pro Ser
 20 25 30

Leu Tyr Arg Ser Phe Asn Leu Glu Leu Ser Arg Cys His Phe Leu Pro
 35 40 45

Leu Cys Leu Leu Val Val Ser Asp Ile Tyr Ser Lys Gln
 50 55 60

<210> 4462
 <211> 28
 <212> PRT
 <213> Homo sapiens

<400> 4462
 Met Leu Leu Asp Ala Pro Ala Ile Ile Phe Leu Leu Val Ala Phe Pro
 1 5 10 15

Asn Tyr Phe His Lys Asn Tyr Phe Ser Tyr Tyr Met
 20 25

<210> 4463
 <211> 26
 <212> PRT
 <213> Homo sapiens

<400> 4463
 Met Ala Tyr Phe Tyr Leu Leu Gly Val Leu Gln Val Leu Pro Ser Leu
 1 5 10 15

His His Tyr Met Ser Ser Glu Val Leu Phe
 20 25

<210> 4464
 <211> 12
 <212> PRT
 <213> Homo sapiens

<400> 4464
 Met Leu Cys Leu Phe Leu Leu Ala Ser Ile Thr Ile
 1 5 10

<210> 4465
 <211> 37
 <212> PRT
 <213> Homo sapiens

<400> 4465
 Met Lys Ile Leu Leu Leu Cys Leu Cys Leu Ile Leu Leu Arg Val Arg
 1 5 10 15
 Ser Cys Arg Arg Lys Ala Ala Arg Ala Ala Leu Gly Met Glu Ala Ala
 20 25 30
 Asp Ala Val Thr Asp
 35

<210> 4466
 <211> 28
 <212> PRT
 <213> Homo sapiens

<400> 4466
 Met Ile Leu Met Met Val Ile Arg Phe Leu Leu Val Pro Leu Leu Ile
 1 5 10 15
 Pro Thr Thr Asp Leu His Ala Thr Ala Asn Ser Ser
 20 25

<210> 4467
 <211> 16
 <212> PRT
 <213> Homo sapiens

<400> 4467
 Met Tyr Phe Phe Cys Phe Cys Gly Phe Ala Cys Ser Gly Tyr Phe Leu
 1 5 10 15

<210> 4468
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 4468
 Met Arg Ser Cys Arg Leu Ala Arg Gly Gln Leu Glu Leu Cys Trp Leu
 1 5 10 15
 Leu Ile Ile Ile Leu Lys Gly Ser Glu Ile Cys Asp Gly Ile Arg Phe
 20 25 30

<210> 4469
 <211> 29
 <212> PRT
 <213> Homo sapiens

<400> 4469
 Met His Met Glu Tyr Leu Leu Val Leu Leu Asn Leu Thr Ser His Pro
 1 5 10 15
 Glu Cys Ile Asp Arg Lys Ser Met Ser Tyr Leu Lys Leu
 20 25

<210> 4470
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 4470
 Met His Leu Ile Trp Leu Cys Val Thr Gly Leu Phe Ile Ser Ala Thr
 1 5 10 15
 Glu Ile His Ala Val Cys Thr Tyr Asn Arg Tyr Ile Val Ser Ala Tyr
 20 25 30

<210> 4471
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 4471
 Met Val Gln Thr Ala Leu Ala Trp Trp Pro Ser Ser His Gln Pro Thr
 1 5 10 15
 Ser Gly Asn Val Ser Val Tyr Cys Trp Pro Tyr Ser Val Thr Asn Pro
 20 25 30
 Ala Ala Pro Cys Ile Ser Trp Leu Pro Thr Pro Thr Ser Pro Trp Thr

Met Gln Leu Ser Leu Pro Lys Ile Phe Phe Tyr Leu Cys Phe Cys Leu
1 5 10 15

Gln Leu Leu Pro Leu Glu Val Ser Leu Ser Phe Lys Phe Arg Glu Pro
20 25 30

Cys Leu Trp His
35

<210> 4487
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4487
Met Val His Pro Leu Val Ala Leu Trp Pro Trp Ala Ser Phe Phe Asn
1 5 10 15

Phe Leu Ile Tyr Thr Val Asn Ser Thr Tyr Ile Ile Gly Leu Val
20 25 30

<210> 4488
<211> 72
<212> PRT
<213> Homo sapiens

<400> 4488
Met Leu Leu Ser Ile Ala Ile Trp Val Ala Trp Ile Thr Leu Leu Met
1 5 10 15

Leu Pro Asp Phe Asp Arg Ser Gly Met Thr Pro Ser Ser Ala Pro Pro
20 25 30

Trp Leu Pro Met Ala Gly Cys Ser Cys Trp Leu Met Leu Val Pro Ser
35 40 45

Phe Gly Cys Ser Gln Ser Asn Glu Thr Pro Trp Ile Ile Leu Leu Arg
50 55 60

Met Leu Ser Val Asn Leu Asn Ser
65 70

<210> 4489
<211> 58
<212> PRT
<213> Homo sapiens

<400> 4489
Met Ser His Arg Ala Gln Pro Thr Phe Thr Ser Lys Val Tyr Val Met
1 5 10 15

Val Val Ile Phe Ser Leu Leu Glu Tyr Ile Lys Trp Leu Ile Trp Gly
20 25 30

Gly Lys Leu Ile Leu Asn Ile Asn Gly Gly Glu Lys Gly Thr Val Phe

35

40

45

Thr Leu Lys Cys Lys Ser Glu His Thr Lys
50 55

<210> 4490
<211> 49
<212> PRT
<213> Homo sapiens

<400> 4490
Met Thr Thr Cys Lys Glu Leu Cys Pro Trp Asn Phe Val Trp Phe Phe
1 5 10 15
Phe Val Phe Asp Leu Leu Gly Arg Met Ser Asn Ile Tyr Lys Ser Arg
20 25 30
Leu Asn Ser Glu Met Asn Ile Gln Ile Ser Ile Ile Gln Arg Leu Leu
35 40 45

Leu

<210> 4491
<211> 35
<212> PRT
<213> Homo sapiens

<400> 4491
Met Ile Thr Cys Ser His Gly Gln Ile Phe Phe Ser Pro Cys Ser Ser
1 5 10 15
Trp Pro Glu Thr Arg Glu Thr Arg Val Lys Ser Tyr Leu Pro Leu Pro
20 25 30
Val Met Pro
35

<210> 4492
<211> 36
<212> PRT
<213> Homo sapiens

<400> 4492
Met Ala Leu Thr Leu Pro Ser Gln Trp Val Phe Leu Val Phe Ile Leu
1 5 10 15
Asp Asp Leu Tyr Ala His Leu Ser Leu Ser Arg Asn Phe Cys Trp Lys
20 25 30
His Leu Leu Phe
35

2094

<210> 4493
<211> 34
<212> PRT
<213> Homo sapiens

<400> 4493
Met Ile Trp Asn Arg Ser Leu Leu Leu Ala Ile Tyr Phe Leu Cys Gly
1 5 10 15
Leu Arg Gln Val Thr Tyr Phe Ser Glu Ser Pro Phe Leu Asn Leu Phe
20 25 30
Val Asn

<210> 4494
<211> 18
<212> PRT
<213> Homo sapiens

<400> 4494
Met Phe Asn Pro Leu Ser Pro His Pro Asp Leu Phe Leu Leu Ser His
1 5 10 15
Leu Ile

<210> 4495
<211> 10
<212> PRT
<213> Homo sapiens

<400> 4495
Leu Glu Phe Phe Phe Phe Phe Phe Val Leu
1 5 10

<210> 4496
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4496
Met Phe Leu Asp Phe Cys Trp Gln Ala Cys Ser Ser Ile Cys Met Ala
1 5 10 15
Pro Ser Pro His Leu His Phe Ser Ala Gln Met Leu Pro Ser Pro
20 25 30

<210> 4497
<211> 9
<212> PRT
<213> Homo sapiens

<400> 4497
Asn Leu Gln Phe Ser Met Thr Gln Leu
1 5

<210> 4498
<211> 3
<212> PRT
<213> Homo sapiens

<400> 4498
Met Ser Val
1

<210> 4499
<211> 26
<212> PRT
<213> Homo sapiens

<400> 4499
Met Leu Ala Ile Ile Thr Phe Leu Lys Ala His Leu Gly Thr His Asn
1 5 10 15
Met Gly Gln Asp Gln Arg Val Glu Thr Ser
20 25

<210> 4500
<211> 6
<212> PRT
<213> Homo sapiens

<400> 4500
Met Cys Phe Leu Cys Val
1 5

<210> 4501
<211> 25
<212> PRT
<213> Homo sapiens

<400> 4501
Met Ala Ile Ser Leu Val Thr Leu Leu Phe Pro Leu Leu Ser Ser Gln
1 5 10 15
Phe Asn Leu Pro Thr Glu Tyr Gln Ala
20 25

<210> 4502
<211> 67
<212> PRT
<213> Homo sapiens

<400> 4502

Pro Pro Asn Leu Cys Leu Thr Phe Leu Leu Pro Phe Val Leu Leu Arg
1 5 10 15

Leu Ser Val Leu Gly Asn Thr Val Phe Leu Arg Val Cys Gly Gly Ser
20 25 30

Tyr Pro Ser Ser Phe Arg Thr Arg Asp Leu Leu Asp Trp Ser Gly Pro
35 40 45

Gln Thr Asp Pro Cys Ser Leu Thr Thr Gly Tyr Pro Gly Thr Cys Val
50 55 60

Pro Ser Leu
65

<210> 4503

<211> 38

<212> PRT

<213> Homo sapiens

<400> 4503

Met Leu Val Ser Pro Arg Arg Val Tyr Phe Leu Asp Leu Thr Cys Phe
1 5 10 15

Val Ala Phe Leu Leu Leu Val Gln Cys Ser Val Leu Thr Val Cys Pro
20 25 30

Gln Val Thr Glu Glu Glu
35

<210> 4504

<211> 34

<212> PRT

<213> Homo sapiens

<400> 4504

Met Asn Ile Thr Ser His Gln Pro Pro His His Asn Phe Met Leu Leu
1 5 10 15

Leu Asp Ile Ile Phe Val Leu Ala Trp Ile Leu Met Leu Leu Thr Asn
20 25 30

Ile Ser

<210> 4505

<211> 61

<212> PRT

<213> Homo sapiens

<400> 4505

Met Val Thr Ile Phe Asn Ile Ile Thr Thr Thr Thr Ile Leu Pro Thr
1 5 10 15

30

```
<210> 4513
<211> 23
<212> PRT
<213> Homo sapiens
```


<210> 4516
 <211> 34
 <212> PRT
 <213> Homo sapiens

<400> 4516
 Val Ala Phe Phe Thr Met Pro Thr Val Val Leu Val Ser Met Phe Asp
 1 5 10 15
 Phe Phe Phe Ser Gly Ile Ser Ser Ser Phe Val Asn Ile Arg Leu Gln
 20 25 30
 Phe Phe

<210> 4517
 <211> 36
 <212> PRT
 <213> Homo sapiens

<400> 4517
 Met Gln Leu Val Tyr Val Leu Trp Leu Leu Ile Ile Lys Val Thr Lys
 1 5 10 15
 Gly Lys Val Glu Lys Ile Thr Ala Met Gln Ser Arg Thr Glu Lys Glu
 20 25 30
 Ala Ser Ser Ile
 35

<210> 4518
 <211> 34
 <212> PRT
 <213> Homo sapiens

<400> 4518
 Met Asn Ala Val Thr Leu Pro Ile Leu Phe Thr Phe Val Ser Pro Val
 1 5 10 15
 Pro Ile Val Val His Gly Ala Glu Trp Pro Phe Asn Lys Tyr Leu Leu
 20 25 30
 Asn Lys

<210> 4519
 <211> 45
 <212> PRT
 <213> Homo sapiens
 <400> 4519

Met Gln Glu Ile Leu Pro Pro Gly Ser His Thr Gly Phe Ser Gly Leu
1 5 10 15

His Leu Pro Phe Ile Gly Phe Thr Phe Thr Thr Glu Arg Tyr Val Trp
20 25 30

Ile Tyr His Ser Pro Gly Arg His Phe Pro Cys Gly Arg
35 40 45

<210> 4520
<211> 65
<212> PRT
<213> Homo sapiens

<400> 4520
Met Ile Trp Leu Ser Val Cys Leu Leu Leu Val Tyr Lys Asn Ala Cys
1 5 10 15

Asp Phe Cys Thr Leu Ile Leu Tyr Pro Glu Thr Leu Leu Lys Leu Leu
20 25 30

Ile Ser Leu Arg Arg Phe Trp Ala Glu Thr Met Gly Phe Ser Arg Tyr
35 40 45

Thr Ile Met Ser Ser Ala Asn Arg Asp Asn Leu Thr Ser Ser Phe Pro
50 55 60

Asn
65

<210> 4521
<211> 37
<212> PRT
<213> Homo sapiens

<400> 4521
Met Lys Ser Cys Gln Asp Ser Asp Ser Pro Phe Pro Val Ile Leu Leu
1 5 10 15

Met Ile Ser Pro Asn Thr Leu Gln Ala Thr Val Thr Thr Lys Asn Thr
20 25 30

Val Ser Ala Gly Leu
35

<210> 4522
<211> 43
<212> PRT
<213> Homo sapiens

<400> 4522
Met Tyr Leu Phe Arg Trp Phe Phe Val Val Thr Tyr Phe Ile Val Leu
1 5 10 15

Ile Ser Cys Phe Cys Ile Thr Val Pro Ile Ala Asn Lys Ser Leu Gly

20

25

30

Gln Phe Ala Phe Leu Lys Lys Lys Lys Lys Lys
 35 40

<210> 4523
 <211> 11
 <212> PRT
 <213> Homo sapiens

<400> 4523
 Met Gly Leu Leu Asp Trp Leu Leu Gly Asn Ser
 1 5 10

<210> 4524
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 4524
 Met Gly Asn Leu Leu Leu Leu Gln Leu Met Leu Leu Lys Leu Leu Thr
 1 5 10 15

Val Ile Pro Phe Pro Trp Leu Phe Phe Gly Glu Lys Ile Ile Cys Ser
 20 25 30

<210> 4525
 <211> 3
 <212> PRT
 <213> Homo sapiens

<400> 4525
 Met Phe Pro
 1

<210> 4526
 <211> 25
 <212> PRT
 <213> Homo sapiens

<400> 4526
 Gly Arg His Thr Trp Ser Leu Leu Leu Ala Ala Leu Ala Cys Leu Val
 1 5 10 15

Pro Leu Leu His Trp Asn Ile Arg Arg
 20 25

<210> 4527

Pro Leu Ser Leu Gly Gly Trp
35

<210> 4531
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4531
Asp Ala Trp Gly Trp Gly Glu Leu Leu Leu Ile Val Lys Asn Ser Leu
1 5 10 15

Gly Ala Ser Asp Leu Met Pro Ser Ile Leu Ser Gly Phe Ser Leu
20 25 30

<210> 4532
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4532
Met Tyr Asn Leu Leu Tyr Phe Pro Leu Cys Ile Leu Leu Trp Val Phe
1 5 10 15

Cys Gly Ser Gln Asp Ser Ser Leu Arg Phe Ile Ser His Glu Ser
20 25 30

<210> 4533
<211> 38
<212> PRT
<213> Homo sapiens

<400> 4533
Met Pro Ser Ala Arg His Cys Ile Ala Ile Ile Ser Phe Asn Leu Leu
1 5 10 15

Leu Ile Leu Trp Val Gly Ile Phe Ile Leu Ile Ser Glu Thr Arg Lys
20 25 30

Leu Arg Val Arg Glu Asn
35

<210> 4534
<211> 40
<212> PRT
<213> Homo sapiens

<400> 4534
Met Ser His Phe His Ser Gln Asn Gln Met Tyr Leu Phe Ser Ala Phe
1 5 10 15

Leu Trp Glu Leu Leu Leu Ser Ala Gly Ile Leu Lys Pro Asn Ile His

20

25

30

Phe Gln Phe Phe Gln Leu Leu Ser
 35 40

<210> 4535
 <211> 18
 <212> PRT
 <213> Homo sapiens

<400> 4535
 Met Gln Lys Val Thr Thr Leu Arg His Ile Glu Asn Cys Leu Ala Gly
 1 5 10 15

Lys Cys

<210> 4536
 <211> 88
 <212> PRT
 <213> Homo sapiens

<400> 4536
 Met Lys Thr Val Ser Ser Arg Met Val Leu Glu Val Thr Met Met Leu
 1 5 10 15

Met Thr Gly Leu Leu Gly Met Glu Leu Val Ala Ser Gly Ala Thr Asp
 20 25 30

Gly Pro Thr Gly Met Arg Ala Thr Asn Arg Asn Phe Asp Ser Ile Trp
 35 40 45

Gln Asn Arg Ile Ser Asn Leu Asn Ser Leu Ser Thr Ser Ser Phe Cys
 50 55 60

Tyr Lys Gly Lys Pro Ser Gly Asn Val Glu Ala Cys Ala Pro Arg Ser
 65 70 75 80

Pro Glu Lys Gly Asn Arg Arg Gly
 85

<210> 4537
 <211> 12
 <212> PRT
 <213> Homo sapiens

<400> 4537
 His Thr Phe Leu Trp Phe Leu Tyr Val Cys Ser Asn
 1 5 10

<210> 4538
 <211> 55
 <212> PRT

<213> Homo sapiens

<400> 4538

Met Ser Gly Trp Gln Ala Trp Tyr Leu Ala Arg Ala Leu Ala Val Gly
1 5 10 15
Val Leu Met Gly Cys Thr Asp His Thr Ala Tyr Val Leu Ala Ile Pro
20 25 30
Ser Cys Ser Pro Ala Arg Ser Leu Lys His Thr Ser Leu Ala Phe Leu
35 40 45
Phe Phe Cys Ser Phe Phe Asn
50 55

<210> 4539

<211> 80

<212> PRT

<213> Homo sapiens

<400> 4539

Met Gly Arg Met Ala Ile Leu Ala Cys Ser Leu Pro Thr Thr Trp Ser
1 5 10 15
Ser Leu Ser Glu Ala Glu Gly Thr Ser Cys Pro Ser Pro Leu Arg His
20 25 30
Gly Phe Leu Ile Ala Gly Arg Gly Gly Leu Gly Val Asp Ile Gln His
35 40 45
Ser Ser Arg Asn Arg Thr Pro Ser Glu Asp Glu Ala Ser Gly Leu Pro
50 55 60
Pro Ala Trp Gln Thr Gln Pro Val Thr Pro Asn Ala Ala Met Ala Trp
65 70 75 80

<210> 4540

<211> 24

<212> PRT

<213> Homo sapiens

<400> 4540

Met Val Val Leu Leu Glu Ile Phe Leu Leu Leu Ala Tyr Val Leu Trp
1 5 10 15
Asn Tyr Thr Cys Ile Thr Asn Asp
20

<210> 4541

<211> 31

<212> PRT

<213> Homo sapiens

<210> 4545
 <211> 2
 <212> PRT
 <213> Homo sapiens

<400> 4545
 Met Leu
 1

<210> 4546
 <211> 31
 <212> PRT
 <213> Homo sapiens

<400> 4546
 Met Phe Leu Tyr Val Ser Val Val Phe Leu Ile Leu Leu Leu Asn Ser
 1 5 10 15
 Ser Gln Leu Cys Lys Tyr Thr Ala Ile Tyr Leu Tyr Thr Tyr Phe
 20 25 30

<210> 4547
 <211> 31
 <212> PRT
 <213> Homo sapiens

<400> 4547
 Met Ser Ile Pro His Leu Trp Cys His Phe Phe Thr Phe Leu Leu Pro
 1 5 10 15
 Cys Ile Lys Arg Gln Lys Ile His Ile Lys Leu Cys His Val Phe
 20 25 30

<210> 4548
 <211> 36
 <212> PRT
 <213> Homo sapiens

<400> 4548
 Met Ala Cys Leu Glu Leu Leu Ile Leu Val Ser Phe Leu Thr Ser Val
 1 5 10 15
 Ile Gln Thr Gln Pro Pro Arg Glu Leu Asp Pro Ser Leu Phe Ser Val
 20 25 30
 Phe Ser Leu Ala
 35

<210> 4549
 <211> 36
 <212> PRT
 <213> Homo sapiens

Table 1. Demographic characteristics of the study population	
Age (years)	Mean (SD)
Male	55.2 (10.5)
Female	56.8 (11.2)
Marital status	
Married	78.5%
Single	21.5%
Education level	
High school or above	65.2%
Below high school	34.8%
Occupation	
Professional	12.3%
Managerial	18.7%
Technical	25.4%
Service	32.1%
Unemployed	11.5%
Income (USD/month)	
< 1000	15.6%
1000-2000	28.9%
2000-3000	35.2%
> 3000	20.3%
Health insurance	
Yes	89.1%
No	10.9%
Smoking status	
Smoker	22.4%
Non-smoker	77.6%
Alcohol consumption	
Regular	8.7%
Occasional	14.3%
Never	77.0%
Comorbidities	
Hypertension	45.2%
Diabetes	18.9%
Cholesterol	32.1%
Arthritis	25.6%
Depression	12.3%
Medication use	
Antidepressants	15.4%
Antipsychotics	8.9%
Mood stabilizers	12.1%
Other	3.6%

Ile Gln Thr Gln Pro Pro Arg Glu Leu Asp Pro Ser Leu Phe Ser Val
20 25 30

```
<210> 4550
<211> 4
<212> PRT
<213> Homo sapiens
```

```
<210> 4551
<211> 12
<212> PRT
<213> Homo sapiens
```

```
<210> 4552
<211> 28
<212> PRT
<213> Homo sapiens
```

Tyr Ile Trp Met Ser Val Tyr Ile Tyr Met Tyr Lys
20 25

```
<210> 4553
<211> 74
<212> PRT
<213> Homo sapiens
```

Ser Leu Gln Gly Cys Pro Gln Arg Ser Tyr Ser Leu Trp Leu Leu Leu
20 25 30

2110

45

Val Lys Gly Leu Phe Pro Met Cys Ser Ala
65 70

```
<210> 4554
<211> 36
<212> PRT
<213> Homo sapiens
```

<400> 4554
Met Val Phe Pro Phe Leu Ser Phe Ala Ser Ser Cys Thr Leu Ser Met
1 5 10 15

Val Phe Ser Asp Ser Ile Phe Leu Asn Ser Leu Phe Ile Phe Leu Gly
20 25 30

Asn Phe Leu Leu
35

```
<210> 4555
<211> 73
<212> PRT
<213> Homo sapiens
```

<400> 4555
Met Leu His Ile Leu Phe Met Gly Leu Arg Val Asn Leu Asn His Glu
1 5 10 15

Thr Phe Leu Ile Ile Cys Cys Glu Ile Tyr Gln Ala Trp Met Ile Ser
20 25 30

Val Phe Leu Val Val Cys Cys Phe Phe Lys Glu Val Ile Gln Val Pro
35 40 45

Leu Leu Ser Cys Gln His Thr Lys Leu Leu Lys Lys Leu Thr Ile Ser
50 55 60

Phe Arg Ser Asn Ser Gln Pro Val Glu
65 70

```
<210> 4556
<211> 9
<212> PRT
<213> Homo sapiens
```

```
<400> 4556
Ser Cys Ser Ile Arg Tyr Asp Leu Phe
  1             5
```

<210> 4557
 <211> 34
 <212> PRT
 <213> Homo sapiens

<400> 4557
 Met Phe Ile Thr Pro Leu Ser Trp Ser Leu Leu Ile Trp Val Leu Leu
 1 5 10 15
 Gly Phe Leu Leu Leu Phe Leu Asn Tyr Ser Arg Leu Leu Tyr Ile Leu
 20 25 30
 Asp Phe

<210> 4558
 <211> 51
 <212> PRT
 <213> Homo sapiens

<400> 4558
 His Phe Ser Lys Phe Thr Leu Ser Leu Leu Ala Ser Gly Arg Tyr Ile
 1 5 10 15
 Tyr Ser His Met Val Phe Thr Phe Phe Ser Ile Val Leu Glu Ala Leu
 20 25 30
 Ile Met Leu Val Glu Gln Leu Thr Ser Arg Val Phe Phe Pro Ala Cys
 35 40 45
 His Thr Cys
 50

<210> 4559
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 4559
 Met Phe Ser Ile Phe Phe Phe Met Lys Thr Leu Phe Phe Pro Leu Ile
 1 5 10 15
 Lys His Ile Leu Leu Trp Cys Leu Phe Phe Leu Leu Ala Val
 20 25 30

<210> 4560
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 4560
 Ile Thr Tyr Gln Asp Val Gly Cys Pro Gly Val Leu Pro Asp Ser Ser
 1 5 10 15
 Leu Leu Val Pro Ile Pro Asn Val Leu Leu Ser Phe Phe Ala Phe His

<210> 4566
 <211> 37
 <212> PRT
 <213> Homo sapiens

<400> 4566
 Met Pro Ser Arg Thr Pro Pro Ser Ser Leu Leu Trp Leu Gly Trp Thr
 1 5 10 15
 Trp Ala Thr Thr Trp Met Trp Leu Pro Cys Pro Ser Pro Cys Trp Ser
 20 25 30
 Ala Cys Ala Gly Gly
 35

<210> 4567
 <211> 33
 <212> PRT
 <213> Homo sapiens

<400> 4567
 Met Pro Val Val Ser Val His Arg Pro Val Thr Val Ser Thr Cys Val
 1 5 10 15
 Pro Ser Pro Gly His Pro Val Lys Arg Ala His Phe Leu Gln Ser Gly
 20 25 30
 Ile

<210> 4568
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 4568
 Met Phe Phe Arg Leu Leu Thr Tyr Leu Leu Phe Leu Leu Pro Thr Ser
 1 5 10 15
 Ala Asp Asn Ser
 20

<210> 4569
 <211> 38
 <212> PRT
 <213> Homo sapiens

<400> 4569
 Met Trp Leu Ile Leu Leu Ala Ile Pro Gly Val Ala Ala His Ala Trp
 1 5 10 15
 Leu Val Trp Val His Arg Gly Ser His Gly Trp Ala Gln Gln Arg Gly
 20 25 30
 Pro Ser Gly Glu Gly Phe

<210> 4570
 <211> 63
 <212> PRT
 <213> Homo sapiens

<400> 4570
 Met Cys Phe Tyr His His Arg Glu Thr Ala Phe Lys Ser Thr Tyr Leu
 1 5 10 15
 Tyr Gly Thr Ala Val Thr Arg His Ile His Pro Ser Arg Thr Asp Ala
 20 25 30
 Cys Asp Pro Glu Ala Arg Arg Ser Phe Val Leu Gly Asp Val His Ile
 35 40 45
 Gly Ile Tyr Leu Thr Ala Lys Glu Pro Phe Ile Tyr Ile Tyr Ile
 50 55 60

<210> 4571
 <211> 35
 <212> PRT
 <213> Homo sapiens

<400> 4571
 Met Arg Leu Leu Thr Ser Gly Trp Leu Leu Trp Ala Arg Thr Gly Pro
 1 5 10 15
 Ser Trp Gly Ala Arg Ser Arg Ile Ser Leu Ile Trp Arg Cys Met Ala
 20 25 30
 Cys Cys Val
 35

<210> 4572
 <211> 44
 <212> PRT
 <213> Homo sapiens

<400> 4572
 Val Leu Ala Ala Phe Val Leu Gly Ala Ala Leu Ala Ala Gly Leu Gly
 1 5 10 15
 Leu Val Cys Ala His Ser Ala Pro His Ala Pro Gly Pro Pro Ala Arg
 20 25 30
 Ala Ser Pro Ser Gly Pro Gln Pro Arg Arg Ser Gln
 35 40

<210> 4573
 <211> 65
 <212> PRT

[illegible]Gly
65

Met Asn Thr Tyr Leu Arg
1 5

Met Val Leu Ala Lys Ala Gln Leu Leu Ile Phe Trp Leu Val Ile Leu
1 5 10 15

Asn Gln Leu Gln Ala Arg Tyr Phe
20

Met Phe Leu Asn Leu Lys Phe Leu Leu Leu Leu His Phe Cys Glu Ser
1 5 10 15

His Leu Lys Phe Phe Arg Glu Gly Ile Leu Ser Phe Val Gln Arg Cys
20 25 30

Leu Tyr Phe Tyr
35

Val Arg Glu Glu Val Glu Ile Leu Lys Glu Gln Ile Arg Glu Leu Val
65 70 75 80

Glu Lys Asn Ser Gln Leu Glu Arg Glu Asn Thr Leu Leu Lys Thr Leu
85 90 95

Ala Ser Pro Glu Gln Leu Glu Lys Phe Gln Ser Cys Leu Ser Pro Glu
100 105 110

Glu Pro Ala Pro Glu Ser Pro Gln Val Pro Glu Ala Pro Gly Gly Ser
115 120 125

Ala Val
130

<210> 4587
<211> 97
<212> PRT
<213> Homo sapiens

<400> 4587
Glu Phe Gly Phe Phe Phe Ser Leu Phe Leu Val Ile Ser Leu Phe Val
1 5 10 15

Trp Lys Glu Ser Tyr Phe Ser Leu Asp Ile Thr Pro Glu Phe Pro Ser
20 25 30

Asp Ala Leu Leu Arg Val Arg Ala Val Ala Asp Ser Leu Lys Phe Ser
35 40 45

Ser Ala Leu Pro Tyr Leu Pro Phe Ile Leu Gly Ile Gly Lys Cys Cys
50 55 60

Lys Gly Pro Asp Gly Lys Tyr Phe Arg Leu Tyr Gly Leu Val Ser Val
65 70 75 80

Ala Asn Ile Gln Leu Cys Gln Cys Thr Leu Lys Ala Ala Ile Asp Asn
85 90 95

Met

<210> 4588
<211> 30
<212> PRT
<213> Homo sapiens

<400> 4588
Met Val Cys Cys Val Val Phe Phe Phe Phe Trp Lys Glu Ser Leu Leu
1 5 10 15

Phe Ile Arg Phe Leu Lys Asp Ser Lys Thr Lys Lys Gly Leu
20 25 30

<210> 4589

<211> 36
<212> PRT
<213> Homo sapiens

<400> 4589
Met Arg Leu Lys Leu Leu Glu Tyr Arg Thr Ile Leu Leu Ile Val Phe
1 5 10 15
Leu His Ser Phe Ser Ala Trp Gln Arg Asp Gly Arg Gly Pro Asp Thr
20 25 30
Asp Tyr Leu Gly
35

<210> 4590
<211> 25
<212> PRT
<213> Homo sapiens

<400> 4590
Met Ile His Leu Lys Ser Val Thr Ser Leu Met Leu Leu Ala Ile Asn
1 5 10 15
Leu Gly Asn Met Lys Gln Ser Cys Ser
20 25

<210> 4591
<211> 59
<212> PRT
<213> Homo sapiens

<400> 4591
Glu Ile Leu Leu Leu Ser Phe Leu Phe Ile Tyr Leu Arg Phe Ser Leu
1 5 10 15
Ser Phe Ser Ser Asp Leu Ser Pro Ser Ile Cys Leu Ser Ser Phe Ile
20 25 30
Phe Leu Ser Ser Pro Phe Leu Pro Ala Ser Ala Thr Ser Leu Val Ser
35 40 45
Trp Leu Leu Thr Phe Leu Arg His Arg Leu Leu
50 55

<210> 4592
<211> 49
<212> PRT
<213> Homo sapiens

<400> 4592
Met Leu Leu Arg Asp Ile Glu Val Tyr Phe Leu Gly Gln Val Gly Ile
1 5 10 15
Phe Tyr Pro Cys Ser Phe Phe Ile Leu Ala Thr His Ile Cys Ser Leu
20 25 30

Ala His Pro Thr Ala Pro Pro Thr Arg Pro Arg Trp Ile Leu Pro Gln
 35 40 45

Cys

<210> 4593
 <211> 31
 <212> PRT
 <213> Homo sapiens

<400> 4593
 Met Pro Thr Ser Gln Lys Gln Met Pro Leu Phe Leu Cys Gln Asn Leu
 1 5 10 15
 Met Val Leu Trp Leu Leu Leu Asn Pro Val Asn Leu Glu Pro Ile
 20 25 30

<210> 4594
 <211> 36
 <212> PRT
 <213> Homo sapiens

<400> 4594
 Met His His Gln Ala Gly His Phe Lys Leu Ser Ser Arg Asn Glu Phe
 1 5 10 15
 Leu Cys Phe Leu Ala Leu Leu Phe Ala Trp Gly Trp Glu Arg Val Val
 20 25 30

Ser Ser Asn Cys
 35

<210> 4595
 <211> 39
 <212> PRT
 <213> Homo sapiens

<400> 4595
 Met Pro Ser Leu Leu His Ile Ile Val Arg Pro Phe Leu Leu Leu Trp
 1 5 10 15
 Ser Pro Thr Ile Ser Phe Val Leu Tyr Pro Gly Glu Arg Gly Arg Val
 20 25 30

Asn Gly Thr Gly Trp Phe Leu
 35

<210> 4596
 <211> 4
 <212> PRT
 <213> Homo sapiens

<400> 4596
Met Trp Arg Trp
1

<210> 4597
<211> 35
<212> PRT
<213> Homo sapiens

<400> 4597
Met Ile Leu Ser Leu Val Leu Ser Tyr Asn Leu Phe Leu Val Gln Leu
1 5 10 15
Ile Leu Cys Thr Ile Thr Ala Glu Met Ser Asn Trp Asp Arg Leu Ala
20 25 30
Ser Lys Ala
35

<210> 4598
<211> 51
<212> PRT
<213> Homo sapiens

<400> 4598
Met Glu Ser Ala Glu Val Leu Ala Leu Pro Gly Lys Ile Leu Ser Leu
1 5 10 15
Tyr Val Ile Val Leu Ser Ser Leu Phe Leu Leu Asn Ser Ile Pro Phe
20 25 30
Leu Val Leu Glu Pro Lys Ala Ile Glu Tyr Ala Lys Lys Lys Lys Lys
35 40 45
Gly Gly Arg
50

<210> 4599
<211> 48
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4599
Met Phe Leu Leu Ser Leu Leu Leu Lys Met Ile His Phe Ile Ala Asn
1 5 10 15
Ser Phe Leu Ser Ser Ile Ser Ser Phe Leu Ser Val Cys His Ser Asp
20 25 30

Leu Cys Tyr Xaa Ser Tyr Leu Val Ala Ile Leu Lys Val Phe Lys Met
 35 40 45

<210> 4600
 <211> 21
 <212> PRT
 <213> Homo sapiens

<400> 4600
 Met Leu Arg Thr Asp Leu Ile Lys Leu Ser Trp Tyr Leu Arg His Phe
 1 5 10 15
 Leu Lys Gly Cys Ile
 20

<210> 4601
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 4601
 Met Ile Lys Ala Val Leu Thr Phe Leu Lys Ile His Cys Leu Gly Trp
 1 5 10 15
 Ala Gly Asn Ser Phe Glu Val Thr Leu Ile Arg Leu Gln Cys
 20 25 30

<210> 4602
 <211> 46
 <212> PRT
 <213> Homo sapiens

<400> 4602
 Met Ser Ile Ile Pro Cys Arg Pro Gln Pro Arg Ala Gly Arg Cys Tyr
 1 5 10 15
 Ser Leu Cys Phe Met Leu Leu Leu Trp Pro Leu Phe Leu Pro Ser Ser
 20 25 30
 Glu Leu Cys Arg Val Tyr Cys Arg Gln Ser Glu Val Ser Phe
 35 40 45

<210> 4603
 <211> 24
 <212> PRT
 <213> Homo sapiens

<400> 4603
 Cys Thr Thr Val Val Leu Phe Leu Leu Ile Glu Leu Lys Gln Leu Tyr
 1 5 10 15

Gly Ala Lys Val Thr Gly Tyr Ser
20

<210> 4604
<211> 45
<212> PRT
<213> Homo sapiens

<400> 4604
Phe Asn Phe Asp Val Ile Leu Leu Leu Val Ile Phe Ala Phe Val Ser
1 5 10 15
Cys Thr Phe Val Ser Tyr Pro Ile Met Cys Ile Ile Tyr Ile Tyr Met
20 25 30
His Ile His Thr His Ile Tyr Ile Tyr Asn Arg Tyr Ile
35 40 45

<210> 4605
<211> 45
<212> PRT
<213> Homo sapiens

<400> 4605
Phe Asn Phe Asp Val Ile Leu Leu Leu Val Ile Phe Ala Phe Val Ser
1 5 10 15
Cys Thr Phe Val Ser Tyr Pro Ile Met Cys Ile Ile Tyr Ile Tyr Met
20 25 30
His Ile His Thr His Ile Tyr Ile Tyr Asn Arg Tyr Ile
35 40 45

<210> 4606
<211> 38
<212> PRT
<213> Homo sapiens

<400> 4606
Met Ala Arg Ala Asp Trp Val Leu Ser Leu Leu Leu Tyr Asn His Ile
1 5 10 15
Thr Ala Leu Pro Cys Ile Phe Ser Ser Lys Asn Gly Asp Tyr Leu Leu
20 25 30
Cys Gly Ser Val Cys Arg
35

<210> 4607
<211> 17
<212> PRT
<213> Homo sapiens

005503.00504

<400> 4620

Met Val Glu Trp Thr Leu Ala Val Leu Val Cys His Leu Phe Leu Ile
1 5 10 15

Leu Tyr Leu Phe Leu Phe Cys Glu Asn Cys Leu Val Val Ser Cys
20 25 30

<210> 4621

<211> 31

<212> PRT

<213> Homo sapiens

<400> 4621

Met His Phe Phe Leu Pro Lys Gln Val Ser Phe Pro Leu Ser Leu Ile
1 5 10 15

Thr Leu Leu Trp Pro Ser Leu Ile Leu Gln Lys Ile Ser Arg Leu
20 25 30

<210> 4622

<211> 57

<212> PRT

<213> Homo sapiens

<400> 4622

Met Thr Cys Ser Arg Ser Ser Ile Phe Leu Thr Leu Leu Leu Leu Gly
1 5 10 15

His Arg Ala Ile Phe Ser Asn Met Pro Glu Lys Leu Arg Ser Leu Ile
20 25 30

Thr Asp Asn Leu Gln Leu Phe Thr Ser Lys Ser Phe Gly Gln Ile Met
35 40 45

Pro Val Lys Glu Cys Lys Phe Tyr Lys
50 55

<210> 4623

<211> 44

<212> PRT

<213> Homo sapiens

<400> 4623

Met Leu Leu Ala Pro Ala Val Gly Gln Leu Leu Tyr Ile Tyr Trp Thr
1 5 10 15

Leu Tyr Phe Ser Arg Ser Phe Leu Arg Trp Val Gly Phe Val Ser Thr
20 25 30

Leu Gln Val Arg Lys Val Lys Leu Arg Glu Leu Lys
35 40

<210> 4624

15

20

Ala Phe Leu Ala Ala Ala Leu Ala Gln Gly Leu Cys Glu Val Leu Leu
1 5 10 15

Val Val Thr Lys Glu Val Glu Glu Lys Gly Ser Trp Leu Arg Thr Asp
20 25 30

<210> 4636
<211> 20
<212> PRT
<213> Homo sapiens

<400> 4636
Gly Lys Cys Leu Ile Asn Leu Val Ile Gly Trp Val Lys Tyr Met Gly
1 5 10 15

Glu Phe Tyr Met
20

<210> 4637
<211> 67
<212> PRT
<213> Homo sapiens

<400> 4637
Asp Thr Trp Phe Val Ser Thr Phe Trp Leu Leu Leu Thr Val Leu Leu
1 5 10 15

Cys Thr Phe Leu Ser Lys Ser Leu Phe Gly Asn Leu Phe Ser Asn Ser
20 25 30

Leu Lys Tyr Leu Gly Met Glu Leu Leu Ser Phe Met Ile Ile Gln Ser
35 40 45

Leu Pro Ser Arg Gly Thr Pro Ala Thr Val Leu Phe Tyr Ile Leu Ile
50 55 60

Ser Ser Val
65

<210> 4638
<211> 34
<212> PRT
<213> Homo sapiens

<400> 4638
Met Gln Phe Thr Asp Ser Arg Gln Cys Cys Leu Leu Phe Thr Leu Ile
1 5 10 15

Leu Phe Thr Val Leu Ser Gln Phe Tyr Phe Leu Glu Glu Trp Tyr Ser
20 25 30

Val Leu

<210> 4639
 <211> 29
 <212> PRT
 <213> Homo sapiens

<400> 4639
 Met Val Thr Ile Ile Ile Leu Gln Pro Ser Ser Phe Pro Leu Pro Leu
 1 5 10 15
 Arg Leu Asn Cys Tyr Asn Ala Asp Tyr Leu Tyr Ser Ser
 20 25

<210> 4640
 <211> 3
 <212> PRT
 <213> Homo sapiens

<400> 4640
 Thr Val Trp
 1

<210> 4641
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 4641
 Met Ser Gln Cys Tyr Arg Asp Phe Val Tyr Gly Gln Phe Trp Gly Gln
 1 5 10 15
 Phe Met Ala Arg Phe Trp Gly Ala Cys Ser Gln His Gln Glu Met Cys
 20 25 30

<210> 4642
 <211> 3
 <212> PRT
 <213> Homo sapiens

<400> 4642
 Met Phe Ser
 1

<210> 4643
 <211> 38
 <212> PRT
 <213> Homo sapiens

[illegible]

Arg Leu Asp Leu Gly Lys Ser Pro Gly Trp Leu Glu Gly Leu Arg Phe
20 25 30

<213> Homo sapiens

Gly Leu Lys Thr Pro Pro Leu Asp His Ala Asn Thr Ala Ile Phe Cys
20 25 30

<213> Homo sapiens

Ser Gly Ile Leu Val Cys Ser Phe Leu Val Ser Leu Ser Gly Phe Gly
20 25 30

<213> Homo sapiens

2137

<210> 4651
 <211> 25
 <212> PRT
 <213> Homo sapiens

<400> 4651
 Phe Leu Phe Val Pro Asn Val Phe Ser Ser Phe Lys Asn Gly Ser His
 1 5 10 15
 Pro Thr Arg Leu Pro Pro Tyr Gln Asp
 20 25

<210> 4652
 <211> 22
 <212> PRT
 <213> Homo sapiens
 <220>
 <221> SITE
 <222> (8)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 4652
 Met Lys Leu Val Ile Met Tyr Xaa Ile Leu Leu Ala Val Ser Ser Leu
 1 5 10 15
 Thr Val Ile Lys Val Ile
 20

<210> 4653
 <211> 38
 <212> PRT
 <213> Homo sapiens

<400> 4653
 Met Arg Ile Leu His Phe Gln Leu Thr Cys Cys Tyr Ile Pro Thr Ile
 1 5 10 15
 Ile Arg Pro Trp Arg Pro Val Ala Trp Phe Pro Leu Ser Leu Leu Cys
 20 25 30
 Phe Phe Leu Trp His Gly
 35

<210> 4654
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 4654
 Met Cys Met His Thr Ser Ser Leu Leu Phe Leu Leu Val Leu Leu Ser
 1 5 10 15
 Asp Thr Tyr Glu Lys Asp His Phe Pro Ser Leu Phe Pro Phe Val Gly
 20 25 30

Ile His Arg Ser Ala Leu Leu Phe Leu Leu Pro Leu Ser Val Phe Ser
 35 40 45

Cys

<210> 4659
 <211> 29
 <212> PRT
 <213> Homo sapiens

<400> 4659
 Ile Lys Ile Val Leu Leu Phe Ser Cys Leu Phe Leu Phe Leu Leu Phe
 1 5 10 15
 Val Phe Leu Thr Ser Leu Tyr Trp Glu Val Thr Pro Val
 20 25

<210> 4660
 <211> 28
 <212> PRT
 <213> Homo sapiens

<400> 4660
 Met Cys Leu Tyr Gln Phe Ile Phe Leu Phe Tyr Trp Leu Val Val Phe
 1 5 10 15
 Tyr Leu Glu Cys Thr Thr Val Tyr Pro Phe Thr Ser
 20 25

<210> 4661
 <211> 6
 <212> PRT
 <213> Homo sapiens

<400> 4661
 Phe Leu Ser Ser Leu Ser
 1 5

<210> 4662
 <211> 57
 <212> PRT
 <213> Homo sapiens

<400> 4662
 Met Glu Phe Leu His Asp Val Gly Val Asp Ala Ile Ala Phe Ser Leu
 1 5 10 15
 Leu Val Phe Leu Leu Thr Val Arg Pro Leu Cys Cys Arg Ser Ala Gly
 20 25 30
 Val Cys Cys Gly Ser Thr Pro Asp Pro Val Ser Leu Ser Ile Thr Ser
 35 40 45

Gly Gly Cys Arg Thr Ala Lys Thr Asp
50 55

<210> 4663
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4663
Met Gly Phe Tyr Leu Arg Val Leu Arg Leu Val Tyr Val Phe Gln Glu
1 5 10 15

Leu Leu Gly His Cys Gly Ser Ala Ala Pro Gly Thr Ser Cys Ala
20 25 30

<210> 4664
<211> 69
<212> PRT
<213> Homo sapiens

<400> 4664
Met Gly Arg Trp Pro Gly Thr Ala Gly Ser Leu Thr Leu Thr Trp Leu
1 5 10 15

Arg Val Glu Ile Trp Leu Val Pro Trp Ser Gly Thr Cys His Ser Pro
20 25 30

Asn Pro Lys Gln Ser Arg Val Trp Ala Gln Asp Cys Pro Leu Pro Phe
35 40 45

Glu Thr Pro Ser Leu Val Pro Ala Ser Lys Thr Asn Arg Glu Ala Thr
50 55 60

Leu Val Ala Gly Ser
65

<210> 4665
<211> 9
<212> PRT
<213> Homo sapiens

<400> 4665
Met Gln Ile Asn Asp Tyr Phe Leu Ser
1 5

<210> 4666
<211> 40
<212> PRT
<213> Homo sapiens

<400> 4666
Gly Gly Ile Tyr Lys Phe Thr Leu Thr Val Cys Ala Ala His Ile Arg

<213> Homo sapiens

<400> 4670

Met Val Cys Leu Leu Leu Arg Thr Leu Cys Pro Leu Cys Ser Arg Gly
1 5 10 15

Lys Thr Gly Leu Glu Val Asn Leu Ser Leu Phe Leu Tyr Ile Glu Gly
20 25 30

Arg Asp Gln
35

<210> 4671

<211> 62

<212> PRT

<213> Homo sapiens

<400> 4671

Met Phe Glu Val Phe His Phe Leu Ala Phe Val Ser Asn Met Val Trp
1 5 10 15

Ile Cys Gly Ala Ile Gln Ile Ser His Gln Ile Val Ser Leu Asn Val
20 25 30

Val Gly Gly Ala Trp Trp Glu Val Thr Gly Leu Tyr Gly Trp Ile Leu
35 40 45

Met Asn His Leu Ile Pro Leu Pro Leu Val Leu Ser Leu Pro
50 55 60

<210> 4672

<211> 41

<212> PRT

<213> Homo sapiens

<400> 4672

Met Ile Phe Leu Leu Phe Cys Ser Thr Phe Pro Leu Phe Lys Thr Ser
1 5 10 15

Ala Leu Ala Thr Gln Asp Leu Arg Gly Ala Phe Leu Glu Ser Cys Leu
20 25 30

Lys Gln Glu Gln Ile Thr Gln Lys His
35 40

<210> 4673

<211> 23

<212> PRT

<213> Homo sapiens

<400> 4673

Gln His Cys Cys Leu Ser Ser Ala Ser Cys Leu Gly Ser Pro Leu Val
1 5 10 15

Trp Glu Asp Cys Cys Ala Pro

<210> 4674
 <211> 48
 <212> PRT
 <213> Homo sapiens

<400> 4674
 Met Ile Gln Thr Pro Pro Thr Arg Pro His Leu Leu Thr Leu Gly Trp
 1 5 10 15
 Ser Thr Cys Phe Leu Val Trp Ser His Glu Ile Arg Thr Gly Ala His
 20 25 30
 Ile Gln Thr Met Ser His Thr Ile Gln Arg Ile Ile Ala Met Cys Lys
 35 40 45

<210> 4675
 <211> 37
 <212> PRT
 <213> Homo sapiens

<400> 4675
 Met Glu Trp Leu Val Ser Pro Ser His Phe Leu Phe Leu Thr Tyr Phe
 1 5 10 15
 Ser Leu Leu Val Ser Leu Asp Gly Glu Val Leu Phe Met Ile Arg Lys
 20 25 30
 Glu Gly Ile Ser Tyr
 35

<210> 4676
 <211> 14
 <212> PRT
 <213> Homo sapiens

<400> 4676
 Met Arg Gly Val Glu Phe Cys Leu Val Phe Trp Pro Cys Trp
 1 5 10

<210> 4677
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 4677
 Met Val Gly Ile Trp Val Cys Val Cys His Leu Ser Val Ser Gln Ala
 1 5 10 15

Leu Lys Asn Ile Ser Tyr Ser Trp His Ser Ser Val His Phe Gly Lys
 20 25 30

<210> 4678
 <211> 43
 <212> PRT
 <213> Homo sapiens

<400> 4678
 Met Pro Phe Leu Leu Leu Leu His Ala Ile Glu His Ser Leu Ser Ser
 1 5 10 15
 His Arg Ile Gln Phe Ser His Leu Arg Lys Ala Phe Pro Asp Ser Asn
 20 25 30
 Arg Gln Val Met His Leu Phe Pro Val Leu Thr
 35 40

<210> 4679
 <211> 35
 <212> PRT
 <213> Homo sapiens

<400> 4679
 Met Leu Ser Tyr Lys Thr Ser Ile Phe Cys Leu Phe Leu Phe Phe Pro
 1 5 10 15
 Pro Phe Leu Thr Arg Gly Glu Lys Lys Thr Glu Gly Lys Lys Gly Gly
 20 25 30
 Asn Glu Ser
 35

<210> 4680
 <211> 22
 <212> PRT
 <213> Homo sapiens

<400> 4680
 Met Cys Val Cys Val Cys Met Tyr Met His Val Phe Met Cys Phe Leu
 1 5 10 15
 Gly Leu Ile Ser Leu Lys
 20

<210> 4681
 <211> 31
 <212> PRT
 <213> Homo sapiens

<400> 4681

Met Leu Ala Leu Lys Leu Val Leu Thr Ala Phe Ser Leu Val Gly Cys
1 5 10 15

Leu Leu Glu Ser Pro Ile Gly Thr Ala Arg Ala Ile Thr Ser Leu
20 25 30

<210> 4682

<211> 24

<212> PRT

<213> Homo sapiens

<400> 4682

Met Val Tyr Met Pro Ala Cys Ala Val Val Val Ser Gly Ile Leu Glu
1 5 10 15

Leu Ala Leu Ser Ala Ser Leu Leu
20

<210> 4683

<211> 31

<212> PRT

<213> Homo sapiens

<400> 4683

Met Tyr Cys Leu Cys Pro Phe Leu Leu Pro Ser Ser Asn Pro Leu Tyr
1 5 10 15

Ser Tyr Cys Gly Leu Cys Ser Thr Val Val Tyr Pro Ser Thr Arg
20 25 30

<210> 4684

<211> 16

<212> PRT

<213> Homo sapiens

<400> 4684

Met Asn Ser Met Asn Tyr Leu Phe Ile Phe Leu Val Ser Leu Glu Ala
1 5 10 15

<210> 4685

<211> 35

<212> PRT

<213> Homo sapiens

<400> 4685

Met Val Leu His Leu His Leu Gln Leu Cys Leu Val Ser Val Cys Lys
1 5 10 15

Ser Lys Ser Leu Val Gln Pro Phe Gln Ala Thr Trp Pro Lys Leu Thr

20

25

30

Lys His Pro
35

<210> 4686
<211> 625
<212> PRT
<213> Homo sapiens

<400> 4686

```

Met Glu Leu Leu Pro Thr His Ala Phe Ser Thr Leu Phe Pro Val Leu
  1              5              10              15

Gln Asp Asn Leu Glu Val Tyr Leu Gly Leu Gln Gln Phe Ile Val Thr
      20              25              30

Ser Gly Ser Gly His Arg Leu Asn Ile Thr Ala Glu Asn Asp Cys Arg
      35              40              45

Arg Leu His Cys Ser Leu Arg Asp Leu Ser Ser Leu Leu Gln Ala Val
      50              55              60

Gly Arg Leu Ala Glu Tyr Phe Ile Gly Asp Val Phe Ala Ala Arg Phe
      65              70              75              80

Asn Asp Ala Leu Thr Val Val Glu Arg Leu Val Lys Val Thr Leu Tyr
      85              90              95

Gly Ser Gln Ile Lys Leu Tyr Asn Ile Glu Thr Ala Val Pro Ser Val
      100             105             110

Leu Lys Pro Asp Leu Ile Asp Val His Ala Gln Ser Leu Ala Ala Leu
      115             120             125

Gln Ala Tyr Ser His Trp Leu Ala Gln Tyr Cys Ser Glu Val His Arg
      130             135             140

Gln Asn Thr Gln Gln Phe Val Thr Leu Ile Ser Thr Thr Met Asp Ala
      145             150             155             160

Ile Thr Pro Leu Ile Ser Thr Lys Val Gln Asp Lys Leu Leu Leu Ser
      165             170             175

Ala Cys His Leu Leu Val Ser Leu Ala Thr Thr Val Arg Pro Val Phe
      180             185             190

Leu Ile Ser Ile Pro Ala Val Gln Lys Val Phe Asn Arg Ile Thr Asp
      195             200             205

Ala Ser Ala Leu Arg Leu Val Asp Lys Ala Gln Val Leu Val Cys Arg
      210             215             220

Ala Leu Ser Asn Ile Leu Leu Leu Pro Trp Pro Asn Leu Pro Glu Asn
      225             230             235             240

Glu Gln Gln Trp Pro Val Arg Ser Ile Asn His Ala Ser Leu Ile Ser
      245             250             255

```


Ala Leu Ser Arg Asp Tyr Arg Asn Leu Lys Pro Ser Ala Val Ala Pro
260 265 270

Gln Arg Lys Met Pro Leu Asp Asp Thr Lys Leu Ile Ile His Gln Thr
275 280 285

Leu Ser Val Leu Glu Asp Ile Val Glu Asn Ile Ser Gly Glu Ser Thr
290 295 300

Lys Ser Arg Gln Ile Cys Tyr Gln Ser Leu Gln Glu Ser Val Gln Val
305 310 315 320

Ser Leu Ala Leu Phe Pro Ala Phe Ile His Gln Ser Asp Val Thr Asp
325 330 335

Glu Met Leu Ser Phe Phe Leu Thr Leu Phe Arg Gly Leu Arg Val Gln
340 345 350

Met Gly Val Pro Phe Thr Glu Gln Ile Ile Gln Thr Phe Leu Asn Met
355 360 365

Phe Thr Arg Glu Gln Leu Ala Glu Ser Ile Leu His Glu Gly Ser Thr
370 375 380

Gly Cys Arg Val Val Glu Lys Phe Leu Lys Ile Leu Gln Val Val Val
385 390 395 400

Gln Glu Pro Gly Gln Val Phe Lys Pro Phe Leu Pro Ser Ile Ile Ala
405 410 415

Leu Cys Met Glu Gln Val Tyr Pro Ile Ile Ala Glu Arg Pro Ser Pro
420 425 430

Asp Val Lys Ala Glu Leu Phe Glu Leu Leu Phe Arg Thr Leu His His
435 440 445

Asn Trp Arg Tyr Phe Phe Lys Ser Thr Val Leu Ala Ser Val Gln Arg
450 455 460

Gly Ile Ala Glu Glu Gln Met Glu Asn Glu Pro Gln Phe Ser Ala Ile
465 470 475 480

Met Gln Ala Phe Gly Gln Ser Phe Leu Gln Pro Asp Ile His Leu Phe
485 490 495

Lys Gln Asn Leu Phe Tyr Leu Glu Thr Leu Asn Thr Lys Gln Lys Leu
500 505 510

Tyr His Lys Lys Ile Phe Arg Thr Ala Met Leu Phe Gln Phe Val Asn
515 520 525

Val Leu Leu Gln Val Leu Val His Lys Ser His Asp Leu Leu Gln Glu
530 535 540

Glu Ile Gly Ile Ala Ile Tyr Asn Met Ala Ser Val Asp Phe Asp Gly
545 550 555 560

Phe Phe Ala Ala Phe Leu Pro Glu Phe Leu Thr Ser Cys Asp Gly Val
565 570 575

Asp Ala Asn Gln Lys Ser Val Leu Gly Arg Asn Phe Lys Met Asp Arg

590

Arg Tyr Tyr Arg Leu Cys Asn Asp Ser Leu Pro Pro Gly Thr Val Lys
610 615 620

Leu
625

```
<210> 4687
<211> 35
<212> PRT
<213> Homo sapiens
```

```

<400> 4687
Met Pro Phe Val Ala Trp Phe Cys Phe Cys Val Phe Ser Thr Ile His
  1                               10                          15
Phe Ser Ile Leu Ala Ser Arg Lys Glu Asn Gln Pro Ser Arg Leu Ala
  20                          25                          30

```

Arg Leu Lys
35

```
<210> 4688
<211> 12
<212> PRT
<213> Homo sapiens
```

<400> 4688
Trp Tyr Ser Phe Cys Leu Val Leu Arg Val Ser Lys
1 5 10

```
<210> 4689
<211> 767
<212> PRT
<213> Homo sapiens
```

<400> 4689															
Met	Lys	Gly	Cys	Leu	Ser	Cys	Ser	Tyr	Ile	Glu	Lys	Phe	Thr	Asp	Phe
1				5					10					15	
Leu	Arg	Leu	Phe	Val	Ser	Val	His	Leu	Arg	Arg	Ile	Glu	Ser	Tyr	Ser
			20					25					30		
Gln	Phe	Pro	Val	Val	Glu	Phe	Leu	Thr	Leu	Leu	Phe	Lys	Tyr	Thr	Phe
		35					40					45			
His	Gln	Pro	Thr	His	Glu	Gly	Tyr	Phe	Ser	Cys	Leu	Asp	Ile	Trp	Thr
	50					55					60				
Leu	Phe	Leu	Asp	Tyr	Leu	Thr	Ser	Lys	Ile	Lys	Ser	Arg	Leu	Gly	Asp
65					70					75					80

Lys	Glu	Ala	Val	Leu	Asn	Arg	Tyr	Glu	Asp	Ala	Leu	Val	Leu	Leu	
				85					90					95	
Thr	Glu	Val	Leu	Asn	Arg	Ile	Gln	Phe	Arg	Tyr	Asn	Gln	Ala	Gln	Leu
			100					105					110		
Glu	Glu	Leu	Asp	Asp	Glu	Thr	Leu	Asp	Asp	Asp	Gln	Gln	Thr	Glu	Trp
		115					120					125			
Gln	Arg	Tyr	Leu	Arg	Gln	Ser	Leu	Glu	Val	Val	Ala	Lys	Val	Met	Glu
	130					135					140				
Leu	Leu	Pro	Thr	His	Ala	Phe	Ser	Thr	Leu	Phe	Pro	Val	Leu	Gln	Asp
145					150					155					160
Asn	Leu	Glu	Val	Tyr	Leu	Gly	Leu	Gln	Gln	Phe	Ile	Val	Thr	Ser	Gly
				165					170					175	
Ser	Gly	His	Arg	Leu	Asn	Ile	Thr	Ala	Glu	Asn	Asp	Cys	Arg	Arg	Leu
			180					185					190		
His	Cys	Ser	Leu	Arg	Asp	Leu	Ser	Ser	Leu	Leu	Gln	Ala	Val	Gly	Arg
		195					200					205			
Leu	Ala	Glu	Tyr	Phe	Ile	Gly	Asp	Val	Phe	Ala	Ala	Arg	Phe	Asn	Asp
	210					215					220				
Ala	Leu	Thr	Val	Val	Glu	Arg	Leu	Val	Lys	Val	Thr	Leu	Tyr	Gly	Ser
225					230					235					240
Gln	Ile	Lys	Leu	Tyr	Asn	Ile	Glu	Thr	Ala	Val	Pro	Ser	Val	Leu	Lys
				245					250					255	
Pro	Asp	Leu	Ile	Asp	Val	His	Ala	Gln	Ser	Leu	Ala	Ala	Leu	Gln	Ala
			260					265					270		
Tyr	Ser	His	Trp	Leu	Ala	Gln	Tyr	Cys	Ser	Glu	Val	His	Arg	Gln	Asn
		275					280					285			
Thr	Gln	Gln	Phe	Val	Thr	Leu	Ile	Ser	Thr	Thr	Met	Asp	Ala	Ile	Thr
	290					295					300				
Pro	Leu	Ile	Ser	Thr	Lys	Val	Gln	Asp	Lys	Leu	Leu	Leu	Ser	Ala	Cys
305					310					315					320
His	Leu	Leu	Val	Ser	Leu	Ala	Thr	Thr	Val	Arg	Pro	Val	Phe	Leu	Ile
				325					330					335	
Ser	Ile	Pro	Ala	Val	Gln	Lys	Val	Phe	Asn	Arg	Ile	Thr	Asp	Ala	Ser
			340					345					350		
Ala	Leu	Arg	Leu	Val	Asp	Lys	Ala	Gln	Val	Leu	Val	Cys	Arg	Ala	Leu
		355					360					365			
Ser	Asn	Ile	Leu	Leu	Leu	Pro	Trp	Pro	Asn	Leu	Pro	Glu	Asn	Glu	Gln
						375					380				
Gln	Trp	Pro	Val	Arg	Ser	Ile	Asn	His	Ala	Ser	Leu	Ile	Ser	Ala	Leu
385					390					395					400

Ser	Arg	Asp	Tyr	Arg	Asn	Leu	Lys	Pro	Ser	Ala	Val	Ala	Pro	Gln	Arg	
				405					410					415		
Lys	Met	Pro	Leu	Asp	Asp	Thr	Lys	Leu	Ile	Ile	His	Gln	Thr	Leu	Ser	
				420					425					430		
Val	Leu	Glu	Asp	Ile	Val	Glu	Asn	Ile	Ser	Gly	Glu	Ser	Thr	Lys	Ser	
				435					440					445		
Arg	Gln	Ile	Cys	Tyr	Gln	Ser	Leu	Gln	Glu	Ser	Val	Gln	Val	Ser	Leu	
				450					455					460		
Ala	Leu	Phe	Pro	Ala	Phe	Ile	His	Gln	Ser	Asp	Val	Thr	Asp	Glu	Met	
				465					470					475		
Leu	Ser	Phe	Phe	Leu	Thr	Leu	Phe	Arg	Gly	Leu	Arg	Val	Gln	Met	Gly	
				485					490					495		
Val	Pro	Phe	Thr	Glu	Gln	Ile	Ile	Gln	Thr	Phe	Leu	Asn	Met	Phe	Thr	
				500					505					510		
Arg	Glu	Gln	Leu	Ala	Glu	Ser	Ile	Leu	His	Glu	Gly	Ser	Thr	Gly	Cys	
				515					520					525		
Arg	Val	Val	Glu	Lys	Phe	Leu	Lys	Ile	Leu	Gln	Val	Val	Val	Gln	Glu	
				530					535					540		
Pro	Gly	Gln	Val	Phe	Lys	Pro	Phe	Leu	Pro	Ser	Ile	Ile	Ala	Leu	Cys	
				545					550					555		
Met	Glu	Gln	Val	Tyr	Pro	Ile	Ile	Ala	Glu	Arg	Pro	Ser	Pro	Asp	Val	
				565					570					575		
Lys	Ala	Glu	Leu	Phe	Glu	Leu	Leu	Phe	Arg	Thr	Leu	His	His	Asn	Trp	
				580					585					590		
Arg	Tyr	Phe	Phe	Lys	Ser	Thr	Val	Leu	Ala	Ser	Val	Gln	Arg	Gly	Ile	
				595					600					605		
Ala	Glu	Glu	Gln	Met	Glu	Asn	Glu	Pro	Gln	Phe	Ser	Ala	Ile	Met	Gln	
				610					615					620		
Ala	Phe	Gly	Gln	Ser	Phe	Leu	Gln	Pro	Asp	Ile	His	Leu	Phe	Lys	Gln	
				625					630					635		
Asn	Leu	Phe	Tyr	Leu	Glu	Thr	Leu	Asn	Thr	Lys	Gln	Lys	Leu	Tyr	His	
				645					650					655		
Lys	Lys	Ile	Phe	Arg	Thr	Ala	Met	Leu	Phe	Gln	Phe	Val	Asn	Val	Leu	
				660					665					670		
Leu	Gln	Val	Leu	Val	His	Lys	Ser	His	Asp	Leu	Leu	Gln	Glu	Glu	Ile	
				675					680					685		
Gly	Ile	Ala	Ile	Tyr	Asn	Met	Ala	Ser	Val	Asp	Phe	Asp	Gly	Phe	Phe	
				690					695					700		
Ala	Ala	Phe	Leu	Pro	Glu	Phe	Leu	Thr	Ser	Cys	Asp	Gly	Val	Asp	Ala	
				705					710					715		
Asn	Gln	Lys	Ser	Val	Leu	Gly	Arg	Asn	Phe	Lys	Met	Asp	Arg	Asp	Leu	

735

Tyr Arg Leu Cys Asn Asp Ser Leu Pro Pro Gly Thr Val Lys Leu
755 760 765

```
<210> 4690
<211> 35
<212> PRT
<213> Homo sapiens
```

<400> 4690
Met Pro Phe Val Ala Trp Phe Cys Phe Cys Val Phe Ser Thr Ile His
1 5 10 15

Phe Ser Ile Leu Ala Ser Arg Lys Glu Asn Gln Pro Ser Arg Leu Ala
20 25 30

Arg Leu Lys
35

```
<210> 4691
<211> 35
<212> PRT
<213> Homo sapiens
```

```
<400> 4691
Met Pro Phe Val Ala Trp Phe Cys Phe Cys Val Phe Ser Thr Ile His
      1               5             10            15
```

Phe Ser Ile Leu Ala Ser Arg Lys Glu Asn Gln Pro Ser Arg Leu Ala
20 25 30

Arg Leu Lys
35

```
<210> 4692
<211> 62
<212> PRT
<213> Homo sapiens
```

<400> 4692
Met Pro Leu Leu Gln Leu Phe Leu Phe Tyr Tyr Phe Leu Pro Ser Tyr
1 5 10 15

Leu Pro Ser Leu Pro Pro Glu Thr His Thr Phe Leu Phe Phe Pro Leu
20 25 30

Thr Ile Pro Gly Ile Phe Ser Arg Thr Thr Phe Leu Glu Val Leu Leu
35 40 45

Leu Leu Ile Leu Lys Phe Ala Val Pro Trp Leu Phe Ser Phe
50 55 60

<210> 4693
 <211> 28
 <212> PRT
 <213> Homo sapiens

<400> 4693
 Met Ser Arg Leu Arg Glu Tyr Leu Ile Phe Leu Leu Phe Phe Ser Ser
 1 5 10 15
 Leu Ala Phe Asn Val Glu Thr Pro Phe Thr Ser His
 20 25

<210> 4694
 <211> 48
 <212> PRT
 <213> Homo sapiens

<400> 4694
 Met Leu Pro Leu Ala Thr Ala Lys Gln Cys Gly Ile Ala Gly Leu Glu
 1 5 10 15
 Cys Leu Leu Ile Phe Leu Leu Gly Phe His Ile Gln Phe Pro Leu Arg
 20 25 30
 Gly Ile Thr Trp Ile Ile Ile Gly Thr Leu Glu Leu Met Ala Ser Met
 35 40 45

<210> 4695
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 4695
 Met Ser Cys Phe Tyr Ile Leu Lys Val Ile Leu His Phe Leu Val Leu
 1 5 10 15
 Asn Tyr Ser Ile Pro Ile Lys Ile Cys Lys Ile Leu Lys Thr
 20 25 30

<210> 4696
 <211> 47
 <212> PRT
 <213> Homo sapiens

<400> 4696
 Met Ile Phe Lys Leu Cys Lys Phe Asp Ser Ile Leu Leu Leu Gly Phe
 1 5 10 15
 Tyr Leu Ile Leu Val Val Cys Phe Ser Phe Ala Glu Val Ser Asn Cys

<400> 4699

Arg His Ser Leu Phe Trp Ile Leu Ile Gln Met Ile Leu Ile Ser Thr
1 5 10 15

Val Ser Gly Ser Ser Gln Ser Ala Leu Thr Pro Ser Ala Cys Gln Gly
20 25 30

His Pro Val Gln Ser Leu Ile Glu Gly Glu Phe Pro Gln
35 40 45

<210> 4700

<211> 23

<212> PRT

<213> Homo sapiens

<400> 4700

Met Leu Ser Ile Phe Cys Phe Ile Trp Phe Ile Tyr Phe Leu Gly Phe
1 5 10 15

Phe Met His Ile Leu Trp His
20

<210> 4701

<211> 36

<212> PRT

<213> Homo sapiens

<400> 4701

Met Pro Glu Leu Phe Leu Leu Val Pro Leu Pro Gly Thr Leu Leu Leu
1 5 10 15

Ser Leu Ser His Gly Trp Pro Leu Ser His Ser Pro Ser Ser Tyr Ser
20 25 30

Glu Thr Thr Phe
35

<210> 4702

<211> 33

<212> PRT

<213> Homo sapiens

<400> 4702

Met Leu Pro Ile Phe Val Thr Leu Phe Phe Val Cys Phe Val Leu Phe
1 5 10 15

Cys Leu Phe Cys Pro Thr Lys Thr Asp Leu Ser Ser Cys Asp Thr Thr
20 25 30

Met

<210> 4703

Met Leu Pro Cys Val Leu Asp Gly Phe Leu Gln Ala Cys Leu
 1 5 10

<210> 4711
 <211> 48
 <212> PRT
 <213> Homo sapiens

<400> 4711
 Met Glu Leu Leu Cys Trp Ser Cys Trp Cys Val Cys Leu Gly Trp Leu
 1 5 10 15

His Thr Gly Trp Pro Ala Ser Gly Thr Ala Leu Gly Thr Met Arg Ser
 20 25 30

Leu Thr Arg Thr Pro Arg Gln Ser Ala Thr Thr Ala Gly Cys Thr Asn
 35 40 45

<210> 4712
 <211> 38
 <212> PRT
 <213> Homo sapiens

<400> 4712
 Glu Pro Leu Cys Leu Ser Arg Leu Val Leu Ser Thr Val His Phe Ser
 1 5 10 15

Leu Ser Val Pro Trp Ala Leu Met Lys Lys Gln Asn Ala Pro Asn Phe
 20 25 30

Ile His Leu Pro Ser Leu
 35

<210> 4713
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 4713
 Met Ser Ser Lys Thr Ala Ser Thr Asn Asn Ile Ala Gln Ala Arg Arg
 1 5 10 15

Thr Val Gln Gln Leu Arg Leu Glu Ala Ser Ile Glu Arg Ile Lys Val
 20 25 30

Ser Lys Ala Ser Ala Asp Leu Met Ser Tyr Cys Glu Glu His Ala Arg
 35 40 45

Ser Asp Pro Leu Leu Ile Gly Ile Pro Thr Ser Glu Asn Pro Phe Lys
 50 55 60

Asp Lys Lys Thr Cys Ile Ile Leu

65

70

<210> 4714
 <211> 57
 <212> PRT
 <213> Homo sapiens

<400> 4714
 Trp Val Asp Trp Gln Arg Lys Trp Thr Thr Lys Phe Phe Met Leu Arg
 1 5 10 15
 Ser Phe Leu Leu Glu Thr Ser Gln Ile Phe Arg Phe Leu Trp Ile Met
 20 25 30
 Lys Gln Lys Ser Thr Glu Asp Leu Leu Leu Leu Asn Leu Ser Trp Gln
 35 40 45
 Arg Met Leu Gln Gln Leu Ser Thr Thr
 50 55

<210> 4715
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 4715
 Gly Lys Gly Ser Gln Pro Pro Ser Pro Pro Ser Pro Ala Pro Ser Ser
 1 5 10 15
 Phe Ser Ser Thr Ser Val Ser Ser Leu Glu Ala Glu Ala Tyr Ala Ala
 20 25 30
 Phe Pro Gly Leu Gly Gln Val Pro Lys Gln Leu Ala Gln Leu Ser Glu
 35 40 45
 Ala Lys Asp Leu Gln Ala Arg Lys Ala Phe Asn Cys Lys Tyr Cys Asn
 50 55 60
 Lys Glu Tyr Leu Ser Leu Gly Ala Leu Lys Met His Ile Arg Ser His
 65 70 75 80
 Thr Leu Pro Cys Val Cys Gly Thr Cys Gly Lys Leu Leu
 85 90

<210> 4716
 <211> 36
 <212> PRT
 <213> Homo sapiens

<400> 4716
 Met Gly Ser Cys Thr Trp Ser Ile Trp Leu Trp Met Val Ser Gly Val
 1 5 10 15
 Ala Cys Arg Ser Gln Gly Leu Ser Asp Cys Ser Pro Lys Ala Phe Leu
 20 25 30

Trp Ser Phe Ala
35

<210> 4717
<211> 21
<212> PRT
<213> Homo sapiens

<400> 4717
Met Tyr Gln Thr Ala Trp Ile Asp Ser Leu Pro Leu Leu Ser Phe Leu
1 5 10 15

Val Thr Ser Val Thr
20

<210> 4718
<211> 37
<212> PRT
<213> Homo sapiens

<400> 4718
Met Gly Leu Val Ser Asn Phe Val Ile Phe Leu Val Phe Val Ser Asp
1 5 10 15

Phe Leu Phe Lys Asn Lys Val Leu Ser Glu Cys Phe Asp Phe Pro Val
20 25 30

Thr Thr Lys Phe Leu
35

<210> 4719
<211> 26
<212> PRT
<213> Homo sapiens

<400> 4719
Met Ala His Ser Thr Ala Arg Trp Leu Trp Trp Leu Pro Arg Met Trp
1 5 10 15

Thr Pro Val Pro Ser Trp Arg Tyr Ser Leu
20 25

<210> 4720
<211> 4
<212> PRT
<213> Homo sapiens

<400> 4720
Tyr Ser Leu Thr
1

<210> 4721
 <211> 57
 <212> PRT
 <213> Homo sapiens

<400> 4721
 Glu Pro Pro Ser Leu Glu Leu Trp Glu Lys Leu Leu Leu Leu Glu Val
 1 5 10 15
 Pro Val Ala Glu Lys Phe Pro Asn Arg Thr Asp Ser Phe Ile Pro Pro
 20 25 30
 Glu Phe Arg Glu Arg Ser Met Trp Thr His Val Pro Leu His Gln Arg
 35 40 45
 Leu Leu Ser Arg His Ser Ser Ser Thr
 50 55

<210> 4722
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 4722
 Phe Leu Leu Phe Leu Leu Phe Leu Leu Gln Gly Lys Tyr Lys Ile Ser
 1 5 10 15
 Leu Glu Trp Ala Ser Arg Phe Ile Gln Pro Pro Pro Gly His Arg Phe
 20 25 30
 Arg Glu Arg Glu Glu Glu Gly Arg Phe Gly Ala Ser Thr Thr Thr Ser
 35 40 45
 Phe Pro His Ala Leu Leu Ser Pro Phe Pro Ser Phe Ser Thr Ser Ser
 50 55 60
 Phe Pro Ser Leu Pro Ser Met Ile Cys Pro Cys Pro Ser Val Ser Ser
 65 70 75 80
 Ser Phe Pro Ser Phe Leu Pro Phe Leu Leu Pro Ser Leu Ala Gly Ser
 85 90 95
 Asn Glu Gln Val Ala Leu Asn Leu Asp Ser Thr Ile Thr Gly Gly
 100 105 110

<210> 4723
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 4723
 Met Ser Pro Pro Ala Leu Phe Leu Phe Ile His Val Leu Phe Leu Tyr
 1 5 10 15
 Gln Tyr Cys Phe Gly Tyr Val Glu Ser Leu Ala Phe Leu Tyr Lys Phe
 20 25 30

<210> 4724
 <211> 15
 <212> PRT
 <213> Homo sapiens

<400> 4724
 Met Trp Ser Val Arg Ser Ile Leu Phe Val Leu Leu Ser Leu Met
 1 5 10 15

<210> 4725
 <211> 613
 <212> PRT
 <213> Homo sapiens

<400> 4725
 Met Phe Arg Cys Gly Gly Leu Ala Ala Gly Ala Leu Lys Gln Lys Leu
 1 5 10 15
 Val Pro Leu Val Arg Thr Val Cys Val Arg Ser Pro Arg Gln Arg Asn
 20 25 30
 Arg Leu Pro Gly Asn Leu Phe Gln Arg Trp His Val Pro Leu Glu Leu
 35 40 45
 Gln Met Thr Arg Gln Met Ala Ser Ser Gly Ala Ser Gly Gly Lys Ile
 50 55 60
 Asp Asn Ser Val Leu Val Leu Ile Val Gly Leu Ser Thr Val Gly Ala
 65 70 75 80
 Gly Ala Tyr Ala Tyr Lys Thr Met Lys Glu Asp Glu Lys Arg Tyr Asn
 85 90 95
 Glu Arg Ile Ser Gly Leu Gly Leu Thr Pro Glu Gln Lys Gln Lys Lys
 100 105 110
 Ala Ala Leu Ser Ala Ser Glu Gly Glu Glu Val Pro Gln Asp Lys Ala
 115 120 125
 Pro Ser His Val Pro Phe Leu Leu Ile Gly Gly Gly Thr Ala Ala Phe
 130 135 140
 Ala Ala Ala Arg Ser Ile Arg Ala Arg Asp Pro Gly Ala Arg Val Leu
 145 150 155 160
 Ile Val Ser Glu Asp Pro Glu Leu Pro Tyr Met Arg Pro Pro Leu Ser
 165 170 175
 Lys Glu Leu Trp Phe Ser Asp Asp Pro Asn Val Thr Lys Thr Leu Arg
 180 185 190
 Phe Lys Gln Trp Asn Gly Lys Glu Arg Ser Ile Tyr Phe Gln Pro Pro
 195 200 205

0050003.04004

Ser	Phe	Tyr	Val	Ser	Ala	Gln	Asp	Leu	Pro	His	Ile	Glu	Asn	Gly	Gly	
210						215					220					
Val	Ala	Val	Leu	Thr	Gly	Lys	Lys	Val	Val	Gln	Leu	Asp	Val	Arg	Asp	
225					230					235					240	
Asn	Met	Val	Lys	Leu	Asn	Asp	Gly	Ser	Gln	Ile	Thr	Tyr	Glu	Lys	Cys	
				245					250					255		
Leu	Ile	Ala	Thr	Gly	Gly	Thr	Pro	Arg	Ser	Leu	Ser	Ala	Ile	Asp	Arg	
			260					265						270		
Ala	Gly	Ala	Glu	Val	Lys	Ser	Arg	Thr	Thr	Leu	Phe	Arg	Lys	Ile	Gly	
		275					280					285				
Asp	Phe	Arg	Ser	Leu	Glu	Lys	Ile	Ser	Arg	Glu	Val	Lys	Ser	Ile	Thr	
	290					295					300					
Ile	Ile	Gly	Gly	Gly	Phe	Leu	Gly	Ser	Glu	Leu	Ala	Cys	Ala	Leu	Gly	
305					310					315					320	
Arg	Lys	Ala	Arg	Ala	Leu	Gly	Thr	Glu	Val	Ile	Gln	Leu	Phe	Pro	Glu	
				325					330					335		
Lys	Gly	Asn	Met	Gly	Lys	Ile	Leu	Pro	Glu	Tyr	Leu	Ser	Asn	Trp	Thr	
			340					345					350			
Met	Glu	Lys	Val	Arg	Arg	Glu	Gly	Val	Lys	Val	Met	Pro	Asn	Ala	Ile	
		355				360						365				
Val	Gln	Ser	Val	Gly	Val	Ser	Ser	Gly	Lys	Leu	Leu	Ile	Lys	Leu	Lys	
	370					375					380					
Asp	Gly	Arg	Lys	Val	Glu	Thr	Asp	His	Ile	Val	Ala	Ala	Val	Gly	Leu	
385					390					395					400	
Glu	Pro	Asn	Val	Glu	Leu	Ala	Lys	Thr	Gly	Gly	Leu	Glu	Ile	Asp	Ser	
			405						410					415		
Asp	Phe	Gly	Gly	Phe	Arg	Val	Asn	Ala	Glu	Leu	Gln	Ala	Arg	Ser	Asn	
		420					425						430			
Ile	Trp	Val	Ala	Gly	Asp	Ala	Ala	Cys	Phe	Tyr	Asp	Ile	Lys	Leu	Gly	
		435				440						445				
Arg	Arg	Arg	Val	Glu	His	His	Asp	His	Ala	Val	Val	Ser	Gly	Arg	Leu	
		450				455					460					
Ala	Gly	Glu	Asn	Met	Thr	Gly	Ala	Ala	Lys	Pro	Tyr	Trp	His	Gln	Ser	
465					470					475					480	
Met	Phe	Trp	Ser	Asp	Leu	Gly	Pro	Asp	Val	Gly	Tyr	Glu	Ala	Ile	Gly	
				485					490					495		
Leu	Val	Asp	Ser	Ser	Leu	Pro	Thr	Val	Gly	Val	Phe	Ala	Lys	Ala	Thr	
			500					505					510			
Ala	Gln	Asp	Asn	Pro	Lys	Ser	Ala	Thr	Glu	Gln	Ser	Gly	Thr	Gly	Ile	
		515					520					525				

Arg Ser Glu Ser Glu Thr Glu Ser Glu Ala Ser Glu Ile Thr Ile Pro
530 535 540

Pro Ser Thr Pro Ala Val Pro Gln Ala Pro Val Gln Gly Glu Asp Tyr
545 550 555 560

Gly Lys Gly Val Ile Phe Tyr Leu Arg Asp Lys Val Val Val Gly Ile
565 570 575

Val Leu Trp Asn Ile Phe Asn Arg Met Pro Ile Ala Arg Lys Ile Ile
580 585 590

Lys Asp Gly Glu Gln His Glu Asp Leu Asn Glu Val Ala Lys Leu Phe
595 600 605

Asn Ile His Glu Asp
610

<210> 4726

<211> 36

<212> PRT

<213> Homo sapiens

<400> 4726

Met Glu Lys Arg Glu Ala Tyr Ile Ser Ser His Leu Leu Ser Met Ser
1 5 10 15

Leu Leu Arg Thr Cys Leu Ile Leu Arg Met Val Val Trp Leu Ser Ser
20 25 30

Leu Gly Arg Arg
35

<210> 4727

<211> 14

<212> PRT

<213> Homo sapiens

<400> 4727

Met Pro Phe Ile Pro Ser Phe Pro Phe Leu Trp Pro Leu Leu
1 5 10

<210> 4728

<211> 1

<212> PRT

<213> Homo sapiens

<400> 4728

Met
1

<210> 4729

<211> 30

<212> PRT
<213> Homo sapiens

<400> 4729
Met Leu Val Ala Leu Leu Cys Leu Ile Arg Ile Leu Gly Glu Met Glu
1 5 10 15
Ser Phe Pro Gln Gly Ala Ala Gly Gly Arg Ile Gly Ser Ile
20 25 30

<210> 4730
<211> 12
<212> PRT
<213> Homo sapiens

<400> 4730
Glu Gln Ser Leu Leu Tyr Phe Ile Leu Cys Cys Phe
1 5 10

<210> 4731
<211> 44
<212> PRT
<213> Homo sapiens

<400> 4731
Met Gly Leu Tyr Lys Gly Leu Glu Ala Lys Leu Leu Gln Thr Val Leu
1 5 10 15
Thr Ala Ala Leu Met Phe Leu Val Tyr Glu Lys Leu Thr Ala Ala Thr
20 25 30
Phe Thr Val Met Gly Leu Lys Arg Ala His Gln His
35 40

<210> 4732
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4732
Met Leu Pro Leu Leu Ile Trp Phe Leu Ala Ser Pro Cys Val Leu Arg
1 5 10 15
Ala Ser Gln Thr Ile His Leu Trp Val Ala Leu Leu Phe Val Ile
20 25 30

<210> 4733
<211> 181
<212> PRT
<213> Homo sapiens

<400> 4733
Gln Leu Ala Ala Pro Ala Phe Pro Ser Pro Ser Leu Ser Tyr Arg Phe

項目	単位	数値	単位	数値
1. 総人口	人	1,234,567	2. 男性人口	612,345
3. 女性人口	人	622,222	4. 0歳人口	15,678
5. 1歳人口	人	14,567	6. 2歳人口	13,456
7. 3歳人口	人	12,345	8. 4歳人口	11,234
9. 5歳人口	人	10,123	10. 6歳人口	9,012
11. 7歳人口	人	8,901	12. 8歳人口	7,890
13. 9歳人口	人	6,789	14. 10歳人口	5,678
15. 11歳人口	人	4,567	16. 12歳人口	3,456
17. 13歳人口	人	2,345	18. 14歳人口	1,234
19. 15歳人口	人	1,123	20. 16歳人口	1,012
21. 17歳人口	人	901	22. 18歳人口	890
23. 19歳人口	人	789	24. 20歳人口	678
25. 21歳人口	人	567	26. 22歳人口	456
27. 23歳人口	人	345	28. 24歳人口	234
29. 25歳人口	人	123	30. 26歳人口	112
31. 27歳人口	人	101	32. 28歳人口	90
33. 29歳人口	人	89	34. 30歳人口	78
35. 31歳人口	人	67	36. 32歳人口	56
37. 33歳人口	人	45	38. 34歳人口	34
39. 35歳人口	人	23	40. 36歳人口	12
41. 37歳人口	人	11	42. 38歳人口	10
43. 39歳人口	人	9	44. 40歳人口	8
45. 41歳人口	人	7	46. 42歳人口	6
47. 43歳人口	人	5	48. 44歳人口	4
49. 45歳人口	人	3	50. 46歳人口	2
51. 47歳人口	人	1	52. 48歳人口	1
53. 49歳人口	人	1	54. 50歳人口	1
55. 51歳人口	人	1	56. 52歳人口	1
57. 53歳人口	人	1	58. 54歳人口	1
59. 55歳人口	人	1	60. 56歳人口	1
61. 57歳人口	人	1	62. 58歳人口	1
63. 59歳人口	人	1	64. 60歳人口	1
65. 61歳人口	人	1	66. 62歳人口	1
67. 63歳人口	人	1	68. 64歳人口	1
69. 65歳人口	人	1	70. 66歳人口	1
71. 67歳人口	人	1	72. 68歳人口	1
73. 69歳人口	人	1	74. 70歳人口	1
75. 71歳人口	人	1	76. 72歳人口	1
77. 73歳人口	人	1	78. 74歳人口	1
79. 75歳人口	人	1	80. 76歳人口	1
81. 77歳人口	人	1	82. 78歳人口	1
83. 79歳人口	人	1	84. 80歳人口	1
85. 81歳人口	人	1	86. 82歳人口	1
87. 83歳人口	人	1	88. 84歳人口	1
89. 85歳人口	人	1	90. 86歳人口	1
91. 87歳人口	人	1	92. 88歳人口	1
93. 89歳人口	人	1	94. 90歳人口	1
95. 91歳人口	人	1	96. 92歳人口	1
97. 93歳人口	人	1	98. 94歳人口	1
99. 95歳人口	人	1	100. 96歳人口	1
101. 97歳人口	人	1	102. 98歳人口	1
103. 99歳人口	人	1	104. 100歳人口	1
105. 101歳人口	人	1	106. 102歳人口	1
107. 103歳人口	人	1	108. 104歳人口	1
109. 105歳人口	人	1	110. 106歳人口	1
111. 107歳人口	人	1	112. 108歳人口	1
113. 109歳人口	人	1	114. 110歳人口	1
115. 111歳人口	人	1	116. 112歳人口	1
117. 113歳人口	人	1	118. 114歳人口	1
119. 115歳人口	人	1	120. 116歳人口	1
121. 117歳人口	人	1	122. 118歳人口	1
123. 119歳人口	人	1	124. 120歳人口	1
125. 121歳人口	人	1	126. 122歳人口	1
127. 123歳人口	人	1	128. 124歳人口	1
129. 125歳人口	人	1	130. 126歳人口	1
131. 127歳人口	人	1	132. 128歳人口	1
133. 129歳人口	人	1	134. 130歳人口	1
135. 131歳人口	人	1	136. 132歳人口	1
137. 133歳人口	人	1	138. 134歳人口	1
139. 135歳人口	人	1	140. 136歳人口	1
141. 137歳人口	人	1	142. 138歳人口	1
143. 139歳人口	人	1	144. 140歳人口	1
145. 141歳人口	人	1	146. 142歳人口	1
147. 143歳人口	人	1	148. 144歳人口	1
149. 145歳人口	人	1	150. 146歳人口	1
151. 147歳人口	人	1	152. 148歳人口	1
153. 149歳人口	人	1	154. 1	

```

<400> 4745
Met Arg Thr Asn Gln Ser Leu Cys Ser Phe Leu Leu Trp Ser Val Pro
  1                      5                      10                      15

Phe His Gln Ala Ala Cys Pro Gln Ala Lys Asp His Pro Leu Glu Pro
          20                      25                      30

Ser Met His Pro Glu Gly Thr Gln Leu Gln Ser Cys Ser Thr Met Leu
      35                      40                      45

Gly Pro Arg Gln Leu Ser Ser Glu Lys Gln Pro Leu Leu Pro Pro Arg
  50                      55                      60

Ser His Leu Lys Ser Ser Pro Met Leu Arg Ala Cys Lys Gly Leu Thr
  65                      70                      75                      80

Ser

```

```

<400> 4746
Met Ala Ile Leu Arg Thr Trp Ile Lys Ile Ser Met Met Thr Val Leu
  1             5             10             15
Met Thr Val Thr Pro Thr Asn Gln Met Glu Lys Val Thr Gly Met Asn
             20             25             30
Leu Cys Thr Val Ile Met Val Arg Glu Thr Thr Met Lys Lys Arg Ser
      35             40             45

```


Gln Val
50

<210> 4747
<211> 16
<212> PRT
<213> Homo sapiens

<400> 4747
Met Leu Thr Gly Val Leu Leu Ser His Ile Leu Cys Ala Val Ile Cys
1 5 10 15

<210> 4748
<211> 46
<212> PRT
<213> Homo sapiens

<400> 4748
Met Ser Leu Leu Ser Asn Val Thr Trp Ser Phe Tyr Thr Leu His Phe
1 5 10 15
Phe Phe Ile Ile Met Lys Asn Gly Ile Pro Pro Gly Ser Ser Lys Ile
20 25 30
Leu Leu Thr Glu Thr Asn Val Gly Val Arg Lys Ile Thr Ile
35 40 45

<210> 4749
<211> 26
<212> PRT
<213> Homo sapiens

<400> 4749
Met Phe Thr Val Leu Leu Leu Glu Leu Phe Ser His Pro Thr Tyr Ala
1 5 10 15
Gly Phe Ser Ile Ala Phe Glu Phe Cys Val
20 25

<210> 4750
<211> 51
<212> PRT
<213> Homo sapiens

<400> 4750
Met Leu Pro His Leu Pro Leu Ser Gly Ser Leu Leu Cys Leu Ser Cys
1 5 10 15
Ser Val Arg Ser Phe Ser Cys Ser Thr Asp Trp Leu Pro Pro Ser Asp
20 25 30

Ser Gly Thr Trp Leu Ser Lys Leu Thr Asn Phe Thr Ser Cys Asn Ile
35 40 45

His His Gln
50

<210> 4751
<211> 61
<212> PRT
<213> Homo sapiens

<400> 4751
Trp Arg Arg Gly Val Gly Ser Cys Cys Trp Pro Ser Gln Pro Cys Trp
1 5 10 15
Trp Pro Thr Ser Ala Arg Leu Arg Thr Arg Thr Val Pro Ser Ser Val
20 25 30
Cys Ser Cys Arg Trp Thr Thr Trp Ser Pro Val Trp Pro Trp Ser Ala
35 40 45
Arg Lys Leu Leu Gln Ser Cys Arg Arg Thr Ser Met Ser
50 55 60

<210> 4752
<211> 115
<212> PRT
<213> Homo sapiens

<400> 4752
Met Lys Pro Val Ser Leu Ile Ser Leu Ser Ile Leu Ser Leu Trp Gly
1 5 10 15
Ile Leu Val Ala Phe Leu Val Thr Glu Cys Ala Cys Arg Thr Leu Ser
20 25 30
Ser Pro Trp Pro Leu Ala Ala Val Leu Cys Ser Pro Cys Leu Cys Arg
35 40 45
Ala Trp Pro Pro Gln Gln Ala Cys Trp Leu Trp Ala Ser Pro Val Leu
50 55 60
Arg Leu His Ala His Ser Leu Gly Ser Leu Ser His Leu Gly Ser Gly
65 70 75 80
Pro Thr Ser Lys Leu Val Asn Leu Gly Leu His Pro Val Ala Arg Cys
85 90 95
Leu Leu Pro Asp Ala Phe Ala Cys Leu Ser His Thr Gly Ser Ser Ser
100 105 110
Lys Ala Pro
115

<210> 4753
 <211> 13
 <212> PRT
 <213> Homo sapiens

<400> 4753
 Met Ile Ile Tyr Leu Tyr Leu Phe Val Val Ile Val Ala
 1 5 10

<210> 4754 .
 <211> 345
 <212> PRT
 <213> Homo sapiens

<400> 4754
 Met Ala Ala Ala Phe Arg Pro Ser Asn Arg Val Leu Leu Gln Ala Leu
 1 5 10 15
 Gln Ile Leu Val Tyr Pro Gly Val Gly Gly Ser Gly Ser Val Ser Cys
 20 25 30
 Arg Cys Pro Leu Gly Ala Lys Arg Tyr Leu Leu Thr Asp Asn Val Val
 35 40 45
 Lys Leu Lys Glu Phe Gln Gln Lys Lys Val Ala Val Ala Cys Asn Leu
 50 55 60
 Ser Gly Thr Lys Glu Thr Tyr Phe Arg Asn Leu Lys Lys Lys Leu Thr
 65 70 75 80
 Gln Asn Lys Leu Ile Leu Lys Gly Glu Leu Ile Thr Leu Leu His Leu
 85 90 95
 Cys Glu Ser Arg Asp His Val Glu Leu Ala Lys Asn Val Ile Tyr Arg
 100 105 110
 Tyr His Ala Glu Asn Lys Asn Phe Thr Leu Gly Glu Tyr Lys Phe Gly
 115 120 125
 Pro Leu Phe Val Arg Leu Cys Tyr Glu Leu Asp Leu Glu Glu Ser Ala
 130 135 140
 Val Glu Leu Met Lys Asp Gln His Leu Arg Gly Phe Phe Ser Asp Ser
 145 150 155 160
 Thr Ser Phe Asn Ile Leu Met Asp Met Leu Phe Ile Lys Gly Lys Tyr
 165 170 175
 Lys Ser Ala Leu Gln Val Leu Ile Glu Met Lys Asn Gln Asp Val Lys
 180 185 190
 Phe Thr Lys Asp Thr Tyr Val Leu Ala Phe Ala Ile Cys Tyr Lys Leu
 195 200 205
 Asn Ser Pro Glu Ser Phe Lys Ile Cys Thr Thr Leu Arg Glu Glu Ala
 210 215 220
 Leu Leu Lys Gly Glu Ile Leu Ser Arg Arg Ala Ser Cys Phe Ala Val
 225 230 235 240

Ala Leu Ala Leu Asn Gln Asn Glu Met Ala Lys Ala Val Ser Ile Phe
245 250 255

Ser Gln Ile Met Asn Pro Glu Ser Ile Ala Cys Ile Asn Leu Asn Leu
260 265 270

Ala Lys Val Arg Glu Lys Val Lys Asp Val Pro Ala Leu Val Ala Lys
275 280 285

Phe Asp Glu Ile Tyr Gly Thr Leu His Ile Thr Gly Gln Val Thr Thr
290 295 300

Asp Ser Leu Asp Ala Val Leu Cys His Thr Pro Arg Asp Arg Lys Ser
305 310 315 320

His Thr Leu Leu Leu Asn Lys Arg Met Val Ser Arg Arg Thr Phe Gln
325 330 335

Pro Leu Ser Gln Ser Leu Leu Ala Glu
340 345

<210> 4755
<211> 107
<212> PRT
<213> Homo sapiens

<400> 4755
Met Gly Ser Ser Leu Gly Leu Cys Leu Gly Lys Ala Pro Ser Ser Ser
1 5 10 15

Gln Leu Phe Leu Phe Phe Ala Met Gly Ser Asp Val Gln Pro Gly Thr
20 25 30

Glu Met Glu Ile Val Val Glu Glu Thr Ile Ser Val Arg Asp Cys Leu
35 40 45

Lys Leu Met Leu Lys Lys Ser Gly Leu Gln Gly Asp Ala Trp His Leu
50 55 60

Arg Lys Met Asp Trp Cys Tyr Glu Ala Gly Glu Pro Leu Cys Glu Glu
65 70 75 80

Asp Ala Thr Leu Lys Glu Leu Leu Ile Cys Ser Gly Asp Thr Leu Leu
85 90 95

Leu Ile Glu Gly Gln Leu Pro Pro Leu Gly Ser
100 105

<210> 4756
<211> 42
<212> PRT
<213> Homo sapiens

<400> 4756
Met Phe Ala Ala Ser Ile Trp Ser Ala Leu Pro Val Cys Leu Phe Leu
1 5 10 15

<210> 4760
 <211> 58
 <212> PRT
 <213> Homo sapiens

<400> 4760
 Met Asp Gly His Met Leu Ile Leu Ile Val Phe Lys Ile Ile Lys Tyr
 1 5 10 15
 Leu Leu Ser Ala Arg His Lys Pro Arg Cys Tyr Glu Tyr Leu Leu Val
 20 25 30
 Phe Arg Asn Tyr Met Val Leu Gly Pro Arg Pro His Glu Thr Tyr Thr
 35 40 45
 Gln Val Gly Ser Arg Gln Asp Asn Val Lys
 50 55

<210> 4761
 <211> 5
 <212> PRT
 <213> Homo sapiens

<400> 4761
 Pro Gly Asn Leu Leu
 1 5

<210> 4762
 <211> 10
 <212> PRT
 <213> Homo sapiens

<400> 4762
 Met Cys Phe Leu Leu Leu Pro Cys Leu Leu
 1 5 10

<210> 4763
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 4763
 Met Ala Leu Leu Tyr Phe Thr Ser Leu Leu Leu Ile Pro Arg Thr Met
 1 5 10 15
 Ser Ser Thr Leu Tyr Val Leu Asn Lys Tyr Leu Val Gly Gly
 20 25 30

<210> 4764
 <211> 26
 <212> PRT
 <213> Homo sapiens

00
00
00
00
00
00
00

00
00
00
00
00

```
<210> 4769
<211> 9
<212> PRT
<213> Homo sapiens
```

```
<210> 4770
<211> 46
<212> PRT
<213> Homo sapiens
```

```
<210> 4771
<211> 12
<212> PRT
<213> Homo sapiens
```

```
<210> 4772
<211> 28
<212> PRT
<213> Homo sapiens
```

2181

<210> 4773
<211> 34
<212> PRT
<213> Homo sapiens

<400> 4773
Met Pro Arg Pro Ser Leu Thr Leu Gly Leu Leu Leu Pro Ser Gln His
1 5 10 15
Leu Cys Ala Asn His Thr Leu Leu Gln His Phe Phe Asn Pro Lys Ile
20 25 30
Ile Ala

<210> 4774
<211> 16
<212> PRT
<213> Homo sapiens

<400> 4774
Met Cys Val Thr Ala Ile Tyr Lys Pro Ile Trp Cys Asn Ser Tyr Pro
1 5 10 15

<210> 4775
<211> 29
<212> PRT
<213> Homo sapiens

<400> 4775
Met Lys Leu Leu Phe Phe Leu Met Arg Asp Val Asn Ser Ile Ser Leu
1 5 10 15
Leu Tyr Leu Ile Thr Cys Leu Pro Cys Phe Cys Val Thr
20 25

<210> 4776
<211> 14
<212> PRT
<213> Homo sapiens

<400> 4776
Met Ala Ser His Gly Gly Phe Asp Leu His Phe Pro Gly Val
1 5 10

<210> 4777
<211> 8
<212> PRT
<213> Homo sapiens

<400> 4777
 Met Val Asn Leu Cys Leu Glu Val
 1 5

<210> 4778
 <211> 55
 <212> PRT
 <213> Homo sapiens

<400> 4778
 Met Lys Glu Ala Phe Arg Trp Ala Leu Phe Ser Met Gln Ala Thr Gly
 1 5 10 15
 His Val Leu Leu Gly Thr Ser Cys Tyr Leu Gln Gln Leu Leu Asp Ala
 20 25 30
 Thr Glu Glu Gly Gln Pro Pro Lys Gly Lys Ala Ser Ser Leu Ile Pro
 35 40 45
 Thr Cys Leu Lys Ile Leu Gln
 50 55

<210> 4779
 <211> 55
 <212> PRT
 <213> Homo sapiens

<400> 4779
 Ile Pro Leu Thr Met Arg Leu Thr Lys Thr Phe Thr Phe Val Gln Lys
 1 5 10 15
 Val Lys Lys Lys Lys Thr Trp Leu Arg Lys Arg Arg His Val Thr Ser
 20 25 30
 Ser Tyr Thr Pro Ile Thr Val Ala Leu Gln Lys Ile Lys Ile Thr Thr
 35 40 45
 Phe Lys Lys Ile Asn Leu Ile
 50 55

<210> 4780
 <211> 12
 <212> PRT
 <213> Homo sapiens

<400> 4780
 Met Phe Ser Leu Glu Val Leu Phe Leu Phe Ala Gly
 1 5 10

<210> 4781
 <211> 43
 <212> PRT
 <213> Homo sapiens

1997-1998		1998-1999		1999-2000		2000-2001		2001-2002		2002-2003		2003-2004		2004-2005		2005-2006		2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014		2014-2015		2015-2016		2016-2017		2017-2018		2018-2019		2019-2020		2020-2021		2021-2022		2022-2023		2023-2024		2024-2025		2025-2026		2026-2027		2027-2028		2028-2029		2029-2030		2030-2031		2031-2032		2032-2033		2033-2034		2034-2035		2035-2036		2036-2037		2037-2038		2038-2039		2039-2040		2040-2041		2041-2042		2042-2043		2043-2044		2044-2045		2045-2046		2046-2047		2047-2048		2048-2049		2049-2050		2050-2051		2051-2052		2052-2053		2053-2054		2054-2055		2055-2056		2056-2057		2057-2058		2058-2059		2059-2060		2060-2061		2061-2062		2062-2063		2063-2064		2064-2065		2065-2066		2066-2067		2067-2068		2068-2069		2069-2070		2070-2071		2071-2072		2072-2073		2073-2074		2074-2075		2075-2076		2076-2077		2077-2078		2078-2079		2079-2080		2080-2081		2081-2082		2082-2083		2083-2084		2084-2085		2085-2086		2086-2087		2087-2088		2088-2089		2089-2090		2090-2091		2091-2092		2092-2093		2093-2094		2094-2095		2095-2096		2096-2097		2097-2098		2098-2099		2099-2100		2100-2101		2101-2102		2102-2103		2103-2104		2104-2105		2105-2106		2106-2107		2107-2108		2108-2109		2109-2110		2110-2111		2111-2112		2112-2113		2113-2114		2114-2115		2115-2116		2116-2117		2117-2118		2118-2119		2119-2120		2120-2121		2121-2122		2122-2123		2123-2124		2124-2125		2125-2126		2126-2127		2127-2128		2128-2129		2129-2130		2130-2131		2131-2132		2132-2133		2133-2134		2134-2135		2135-2136		2136-2137		2137-2138		2138-2139		2139-2140		2140-2141		2141-2142		2142-2143		2143-2144		2144-2145		2145-2146		2146-2147		2147-2148		2148-2149		2149-2150		2150-2151		2151-2152		2152-2153		2153-2154		2154-2155		2155-2156		2156-2157		2157-2158		2158-2159		2159-2160		2160-2161		2161-2162		2162-2163		2163-2164		2164-2165		2165-2166		2166-2167		2167-2168		2168-2169		2169-2170		2170-2171		2171-2172		2172-2173		2173-2174		2174-2175		2175-2176		2176-2177		2177-2178		2178-2179		2179-2180		2180-2181		2181-2182		2182-2183		2183-2184		2184-2185		2185-2186		2186-2187		2187-2188		2188-2189		2189-2190		2190-2191		2191-2192		2192-2193		2193-2194		2194-2195		2195-2196		2196-2197		2197-2198		2198-2199		2199-2200		2200-2201		2201-2202		2202-2203		2203-2204		2204-2205		2205-2206		2206-2207		2207-2208		2208-2209		2209-2210		2210-2211		2211-2212		2212-2213		2213-2214		2214-2215		2215-2216		2216-2217		2217-2218		2218-2219		2219-2220		2220-2221		2221-2222		2222-2223		2223-2224	
-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--

Cys His Leu Ser Lys Pro Lys Gly Thr Ser Ser
35 40

<213> Homo sapiens

Leu Cys

<213> Homo sapiens

<223> Xaa equals any of the naturally occurring L-amino acids

<223> Xaa equals any of the naturally occurring L-amino acids

Gln His Ser Leu Leu Ser Ser
50 55

<213> Homo sapiens

Met His Val Leu Leu Phe Ser Phe Leu Ile Pro Phe Leu Leu Leu Ser
1 5 10 15

Pro Val Gly Val Thr Cys Asn Ser His Met Leu Glu Arg Gln Xaa Ser
20 25 30

Trp Leu Lys Lys Arg Ser Thr Gln Ala Ser Gln His Val
35 40 45

<210> 4791
<211> 13
<212> PRT
<213> Homo sapiens

<400> 4791
His Val Leu Phe Asp Ala Phe Ser Leu Leu His Cys Phe
1 5 10

<210> 4792
<211> 81
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4792
Met Glu Cys Leu Leu Tyr Arg Thr Ile Cys Leu Phe Tyr Phe Leu Val
1 5 10 15
Arg Phe Leu Phe Ser Xaa Leu Leu Leu Met Lys Leu Phe Leu Pro Ile
20 25 30
Ile Asn Pro Asn Ser Trp Thr Leu Trp Leu Gly Asn Ser Leu Asn Phe
35 40 45
Gln Pro Tyr Gly Ile Ile Val Ser Leu Ser Leu Ser Leu Leu Ser
50 55 60
Leu Phe Ser Ser Ser Pro Tyr Phe Leu Ser Asn Lys Tyr Cys Leu Leu
65 70 75 80

Ile

<210> 4793
<211> 218
<212> PRT
<213> Homo sapiens

<400> 4793
Met Ala Met Phe Glu Gln Met Arg Ala Asn Val Gly Lys Leu Leu Lys
1 5 10 15

Gly Ile Asp Arg Tyr Asn Pro Glu Asn Leu Ala Thr Leu Glu Arg Tyr
20 25 30

Val Glu Thr Gln Ala Lys Glu Asn Ala Tyr Asp Leu Glu Ala Asn Leu
35 40 45

Ala Val Leu Lys Leu Tyr Gln Phe Asn Pro Ala Phe Phe Gln Thr Thr
50 55 60

Val Thr Ala Gln Ile Leu Leu Lys Ala Leu Thr Asn Leu Pro His Thr
65 70 75 80

Asp Phe Thr Leu Cys Lys Cys Met Ile Asp Gln Ala His Gln Glu Glu
85 90 95

Arg Pro Ile Arg Gln Ile Leu Tyr Leu Gly Asp Leu Leu Glu Thr Cys
100 105 110

His Phe Gln Ala Phe Trp Gln Ala Leu Asp Glu Asn Met Asp Leu Leu
115 120 125

Glu Gly Ile Thr Gly Phe Glu Asp Ser Val Arg Lys Phe Ile Cys His
130 135 140

Val Val Gly Ile Thr Tyr Gln His Ile Asp Arg Trp Leu Leu Ala Glu
145 150 155 160

Met Leu Gly Asp Leu Ser Asp Ser Gln Leu Lys Val Trp Met Ser Lys
165 170 175

Tyr Gly Trp Ser Ala Asp Glu Ser Gly Gln Ile Phe Ile Cys Ser Gln
180 185 190

Glu Glu Ser Ile Lys Pro Lys Asn Ile Val Glu Lys Ile Asp Phe Asp
195 200 205

Ser Val Ser Ser Ile Met Ala Ser Ser Gln
210 215

<210> 4794
<211> 30
<212> PRT
<213> Homo sapiens

<400> 4794
Met Ala Ser Ser Leu Leu Ala Gln Ile Val Leu Gly Gly Trp Leu Phe
1 5 10 15

Val Gly Ala Phe Asn Ile Gln Arg Gly Glu Tyr Cys Ser Asp
20 25 30

<210> 4795
<211> 12
<212> PRT
<213> Homo sapiens

<400> 4795
Met Thr Lys Ile Leu Trp Leu Phe Leu Phe Leu Leu
1 5 10

<210> 4796
<211> 27
<212> PRT
<213> Homo sapiens

<400> 4796
Met Phe Gly Val Leu Leu Val Tyr Leu Leu Phe Tyr Thr Phe Ala Thr
1 5 10 15

Ile Ser Leu Val Asn Gly Met Val Trp Gly Phe
20 25

<210> 4797
<211> 22
<212> PRT
<213> Homo sapiens

<400> 4797
Glu Trp Asn Ile Phe Leu Leu Phe Ser Cys Ile Cys Leu Tyr Phe Ser
1 5 10 15

Leu Met Asn Asp Trp Ser
20

<210> 4798
<211> 12
<212> PRT
<213> Homo sapiens

<400> 4798
Arg Pro Leu Trp Gly Leu Gly Lys Arg Ser Leu His
1 5 10

<210> 4799
<211> 27
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4799

Met Lys Ser Asp Leu Gly Pro Glu Leu Gln Xaa Ser Leu Ile Leu Gln
 1 5 10 15

Asn Thr Ile Ile Ser Ala Tyr Glu Lys Asp Xaa
 20 25

<210> 4800
 <211> 31
 <212> PRT
 <213> Homo sapiens

<400> 4800
 Met Trp Pro Cys Met Thr Leu Leu Leu Leu Tyr Phe Leu Phe Pro Phe
 1 5 10 15

Gln Met Gly Ile Arg Thr Val Gly Gln Gln Gln Ser Gln Ser Gln
 20 25 30

<210> 4801
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 4801
 Thr Leu Ile Thr Cys Phe Ala Asn Phe Lys Cys Leu Asn Ile Ser Glu
 1 5 10 15

Thr Ser Ser Lys Tyr Val Gly Gln Leu Lys Asn Phe Asp Cys
 20 25 30

<210> 4802
 <211> 43
 <212> PRT
 <213> Homo sapiens

<400> 4802
 Met Pro Leu Leu Phe Phe Ser Val Ser Thr Leu Phe Ser Gly Ser Val
 1 5 10 15

Thr Leu Gln Gln Arg Gly Met Phe Leu Pro Trp Thr Gly Thr Gly Asn
 20 25 30

Arg Cys Leu Pro Cys Tyr Gly His Gly Leu Asn
 35 40

<210> 4803
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 4803
 Lys Gln Leu Tyr Leu Glu Ser Tyr Cys Leu Gly Phe Leu Ile Arg His
 1 5 10 15

Ser Ser Pro Asp
20

<210> 4804
<211> 14
<212> PRT
<213> Homo sapiens

<400> 4804
Leu Arg Pro Arg Ser Pro Gly Leu Ala Gly Arg Gly Cys Leu
1 5 10

<210> 4805
<211> 73
<212> PRT
<213> Homo sapiens

<400> 4805
Met Gly Cys Phe Val Val Val Val Phe Val Val Gly His Leu Ser
1 5 10 15
Ile Phe Ser His Gln Phe Cys Ser Leu Leu Ala Met Asp Lys Ile Gly
20 25 30
Ser Phe Trp Leu Ile Lys Lys Asp Asn Phe Ile Lys Trp His Phe Lys
35 40 45
Gln Ala Ile Val Ser Phe Ile Ile Cys Asn Ala His Gly Lys Ala Lys
50 55 60
Thr Phe Val Met Lys Glu Leu Leu Ile
65 70

<210> 4806
<211> 117
<212> PRT
<213> Homo sapiens

<400> 4806
Val Ala Val His Leu Phe Ala Leu Met Ile Ser Thr Cys Ile Leu Pro
1 5 10 15
Asn Ile Glu Ala Val Ser Asn Val His Asn Leu Asn Ser Val Lys Glu
20 25 30
Ser Pro His Glu Arg Met His Arg His Ile Glu Leu Ala Trp Ala Phe
35 40 45
Ser Thr Val Ile Gly Thr Leu Leu Phe Leu Ala Glu Val Val Leu Leu
50 55 60
Cys Trp Val Lys Phe Leu Pro Leu Lys Lys Gln Pro Gly Gln Pro Arg
65 70 75 80

<400> 4810

Met Cys Pro Arg Leu Leu Phe Ser Trp Ala Phe Leu Ser Arg
1 5 10

<210> 4811

<211> 56

<212> PRT

<213> Homo sapiens

<400> 4811

Met Lys Arg Gly Val Leu Gly Gln Leu Phe Ser Ser Leu His Pro Ile
1 5 10 15

Ser Thr Pro Pro Pro Trp Pro Pro Ala Ser Leu Arg Leu Ile Gln Tyr
20 25 30

Pro Asn Leu Leu Leu Ile Thr Glu Lys Asn Val Lys Lys Glu Glu Lys
35 40 45

Arg Lys Ala Arg Ser Leu Ser Lys
50 55

<210> 4812

<211> 39

<212> PRT

<213> Homo sapiens

<400> 4812

Met Arg Met Leu Arg Glu Ile Val Gly Cys Leu Glu Phe His Tyr Ile
1 5 10 15

Phe Cys Phe Tyr Phe Leu Ile Pro Arg Cys Phe Leu Lys Tyr Ser Asp
20 25 30

Lys Tyr Leu Ser Tyr Ile Asp
35

<210> 4813

<211> 36

<212> PRT

<213> Homo sapiens

<400> 4813

Met Gln Leu Phe Ser Leu Phe Phe Ser Phe Pro Pro Ser Leu His Pro
1 5 10 15

Ser Pro Ile Pro Pro Ser Leu Pro Tyr Ser Ser Arg Leu Pro Pro Ser
20 25 30

Leu Pro Pro Ser
35

<210> 4814

<211> 36
<212> PRT
<213> Homo sapiens

<400> 4814
Met Asp Asn Arg Thr Ala Leu Ser Val Gly Met Val Val Leu Leu Glu
1 5 10 15
Asp Cys Ile Ile Gly Gly Leu Val Ser Ser Ser Leu Pro Gly Gln Ser
20 25 30
Ser Glu Val Leu
35

<210> 4815
<211> 92
<212> PRT
<213> Homo sapiens

<400> 4815
Met Ala Cys Ile Leu Phe Ser Leu Leu Cys Leu Ile Leu Phe Asp Phe
1 5 10 15
Pro Leu Gln His Ser Val Ser Val Lys Gly Phe Tyr Ala Phe Thr Ser
20 25 30
His Val Leu Asn Thr Leu Arg Thr Thr His Leu Val Phe Thr Leu Leu
35 40 45
Pro Val Asn Val Trp Asn Leu Glu Ser His Arg Val Ala Leu Lys Gln
50 55 60
Cys Val Phe Ser Leu Arg Ser Ser Ala His Phe Ala Thr Thr Arg Glu
65 70 75 80
Glu Phe Ser Ala Lys Ala Asn Pro Cys Ser Leu Thr
85 90

<210> 4816
<211> 22
<212> PRT
<213> Homo sapiens

<400> 4816
Glu Arg Cys Leu Leu Ile Leu Cys Val Val Thr Gln Arg Ser Ser Thr
1 5 10 15
Phe Pro Ser Leu Cys Arg
20

<210> 4817
<211> 70
<212> PRT
<213> Homo sapiens

<400> 4817

Met Trp Leu Leu Ile Asn Leu Thr Ala Ser Arg Cys Ser Ser Pro Pro
 1 5 10 15
 Cys Gln Ala Leu Cys Leu Leu Ile Ala Leu Trp Gly His Ser Leu Ile
 20 25 30
 Tyr Ser Pro Ala Leu Gly Asn Arg Ser Cys His Tyr Pro Ser Leu Ser
 35 40 45
 Ala Gln Gly Lys Ile Asn Ala Leu Arg Ile Val Ile Ile Phe Pro Arg
 50 55 60
 Leu Pro Ser Trp Trp Cys
 65 70

<210> 4818

<211> 27

<212> PRT

<213> Homo sapiens

<400> 4818

Ala Arg Val Cys Ser Lys Val Thr Leu Leu Leu Phe Trp Thr Leu Leu
 1 5 10 15
 Ser Gly Lys Lys Gly Cys Arg Leu Pro Ala Met
 20 25

<210> 4819

<211> 350

<212> PRT

<213> Homo sapiens

<400> 4819

Met His Pro Ala Ala Phe Pro Leu Pro Val Val Val Ala Ala Val Leu
 1 5 10 15
 Trp Gly Ala Ala Pro Thr Arg Gly Leu Ile Arg Ala Thr Ser Asp His
 20 25 30
 Asn Ala Ser Met Asp Phe Ala Asp Leu Pro Ala Leu Phe Gly Ala Thr
 35 40 45
 Leu Ser Gln Glu Gly Leu Gln Gly Phe Leu Val Glu Ala His Pro Asp
 50 55 60
 Asn Ala Cys Ser Pro Ile Ala Pro Pro Pro Pro Ala Pro Val Asn Gly
 65 70 75 80
 Ser Val Phe Ile Ala Leu Leu Arg Arg Phe Asp Cys Asn Phe Asp Leu
 85 90 95
 Lys Val Leu Asn Ala Gln Lys Ala Gly Tyr Gly Ala Ala Val Val His
 100 105 110
 Asn Val Asn Ser Asn Glu Leu Leu Asn Met Val Trp Asn Ser Glu Glu
 115 120 125

Ile Gln Gln Gln Ile Trp Ile Pro Ser Val Phe Ile Gly Glu Arg Ser
130 135 140

Ser Glu Tyr Leu Arg Ala Leu Phe Val Tyr Glu Lys Gly Ala Arg Val
145 150 155 160

Leu Leu Val Pro Asp Asn Thr Phe Pro Leu Gly Tyr Tyr Leu Ile Pro
165 170 175

Phe Thr Gly Ile Val Gly Leu Leu Val Leu Ala Met Gly Ala Val Met
180 185 190

Ile Ala Arg Cys Ile Gln His Arg Lys Arg Leu Gln Arg Asn Arg Leu
195 200 205

Thr Lys Glu Gln Leu Lys Gln Ile Pro Thr His Asp Tyr Gln Lys Gly
210 215 220

Asp Gln Tyr Asp Val Cys Ala Ile Cys Leu Asp Glu Tyr Glu Asp Gly
225 230 235 240

Asp Lys Leu Arg Val Leu Pro Cys Ala His Ala Tyr His Ser Arg Cys
245 250 255

Val Asp Pro Trp Leu Thr Gln Thr Arg Lys Thr Cys Pro Ile Cys Lys
260 265 270

Gln Pro Val His Arg Gly Pro Gly Asp Glu Asp Gln Glu Glu Glu Thr
275 280 285

Gln Gly Gln Glu Glu Gly Asp Glu Gly Glu Pro Arg Asp His Pro Ala
290 295 300

Ser Glu Arg Thr Pro Leu Leu Gly Ser Ser Pro Thr Leu Pro Thr Ser
305 310 315 320

Phe Gly Ser Leu Ala Pro Ala Pro Leu Val Phe Pro Gly Pro Ser Thr
325 330 335

Asp Pro Pro Leu Ser Pro Pro Ser Ser Pro Val Ile Leu Val
340 345 350

<210> 4820
<211> 55
<212> PRT
<213> Homo sapiens

<400> 4820
Met Tyr Cys Leu Trp Leu Leu Leu Leu Tyr Asn Ser Trp Val Glu Tyr
1 5 10 15

Leu Glu Gln Arg Pro Asn Val Trp Gln Lys Ser Asn Ile Phe Thr Ile
20 25 30

Leu Tyr Arg Lys Lys Met Ser Thr Tyr Ile Tyr Thr Tyr Tyr Asn Phe
35 40 45

Ser Lys Asn Thr Glu Phe Lys

50

55

<210> 4821

<211> 27

<212> PRT

<213> Homo sapiens

<400> 4821

Met Thr Val Met Val Thr Leu Leu Phe Leu Leu Arg Tyr Val Thr Ala
 1 5 10 15

Leu Arg Leu Thr Arg Ala Thr Trp Ser Cys Trp
 20 25

<210> 4822

<211> 71

<212> PRT

<213> Homo sapiens

<400> 4822

Met Ile Met Ser Ser Ser Asn Ser Ser Ile Trp Pro Ala Met Pro Cys
 1 5 10 15

Met Leu Leu Ser Val Tyr Ser Tyr Leu Phe Ser Cys Ile Ser His Gly
 20 25 30

Ser Pro Arg Leu Ser Ala Leu Gln Pro Pro Lys Pro Cys Ser Ser Phe
 35 40 45

Ser Asn Ser Ser Ala Pro Tyr Leu Arg Ala Phe Ala Ser Ala Arg Cys
 50 55 60

Thr Ser Phe Pro Tyr Phe Thr
 65 70

<210> 4823

<211> 57

<212> PRT

<213> Homo sapiens

<400> 4823

Met Asp Phe Leu Cys Phe Leu Leu Leu Ser Gly Ala Thr Pro Ala Leu
 1 5 10 15

Thr Ser Ser Gly Thr Ser Cys Gln His Ser Pro His Ser Leu Met Pro
 20 25 30

Gln Ser Cys His Thr Arg Leu Ile Pro Cys Leu Pro Val Cys Leu Gln
 35 40 45

Pro Asp Ala Ala Arg Pro Arg Leu Pro
 50 55

<210> 4824
<211> 2
<212> PRT
<213> Homo sapiens

<400> 4824
Phe Pro
1

<210> 4825
<211> 24
<212> PRT
<213> Homo sapiens

<400> 4825
Ile Arg Arg Val Leu Trp Ala Pro Gly Gln Pro Ser Cys Leu Ser Ser
1 5 10 15
Pro Ala Val Ser Arg Gly Arg Trp
20

<210> 4826
<211> 24
<212> PRT
<213> Homo sapiens

<400> 4826
Ile Arg Arg Val Leu Trp Ala Pro Gly Gln Pro Ser Cys Leu Ser Ser
1 5 10 15
Pro Ala Val Ser Arg Gly Arg Trp
20

<210> 4827
<211> 24
<212> PRT
<213> Homo sapiens

<400> 4827
Ile Arg Arg Val Leu Trp Ala Pro Gly Gln Pro Ser Cys Leu Ser Ser
1 5 10 15
Pro Ala Val Ser Arg Gly Arg Trp
20

<210> 4828
<211> 54
<212> PRT
<213> Homo sapiens

<400> 4828
Met Cys Gln Thr Trp Ala Arg Cys Leu Arg Leu Met Phe His Pro Thr
1 5 10 15

Cys Leu Thr Cys Pro Ala Leu Pro Thr Thr Ser Cys Thr Leu Pro Thr
 20 25 30

Trp Ala Pro Ala Leu Pro Pro Leu Pro Leu Ala Pro Phe Gln Asn Cys
 35 40 45

Pro Pro Ser Thr Leu Arg
 50

<210> 4829
 <211> 13
 <212> PRT
 <213> Homo sapiens

<400> 4829
 Met Leu Pro Gly Val Leu Trp Tyr Leu Ala Arg Cys Arg
 1 5 10

<210> 4830
 <211> 31
 <212> PRT
 <213> Homo sapiens

<400> 4830
 Met Val Gly Pro Arg Leu Pro Met Gly Leu Leu Phe Val Ala Ser Phe
 1 5 10 15

Leu Phe Leu Phe Ile Gln Cys Val His Met Pro Arg Ser Tyr Leu
 20 25 30

<210> 4831
 <211> 89
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (67)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (70)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (79)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 4831
 Met Arg Ser Pro His Val Arg Val His Leu Val Tyr Phe Gln Arg Leu
 1 5 10 15

Ala Arg Gly Ser Asp Glu Arg Thr Cys Ser Ala Pro Ala Phe Ser Ser
20 25 30

Phe Arg Glu Phe Ser Arg Gly Leu Gln Arg Phe Pro His Ala Ala Ser
35 40 45

His Ser Ser Cys Thr Ile Val His Ser Asn Ser Asn Gly Gln Gly Leu
50 55 60

Gln Ser Xaa Arg Ile Xaa Ala Asn Ile Tyr Tyr Phe Met Trp Xaa Phe
65 70 75 80

Phe Leu Phe Phe Phe Phe Phe Phe
85

<210> 4832
<211> 11
<212> PRT
<213> Homo sapiens

<400> 4832
Val Lys Thr Ser His Val Phe Glu Ser Glu Asn
1 5 10

<210> 4833
<211> 91
<212> PRT
<213> Homo sapiens

<400> 4833
Met Asn Lys Ser Thr Phe Leu Phe Leu Ile Ile Met Trp Pro Asn Val
1 5 10 15

Tyr Ile Ser Leu Ser Val Ala His His Ile Val Leu Thr Lys Thr Ile
20 25 30

Ser Ser Phe Thr Pro Ala Gln Ile Phe Lys Tyr Ser Leu Leu Phe Pro
35 40 45

Thr Ser Val Ser Gly Ile Ala Ile Leu Phe Lys Thr Tyr Leu Lys Asn
50 55 60

Val Gln Ala Ser His Leu Cys Val Lys Leu Phe Ser Leu Phe Gln Cys
65 70 75 80

Asp Glu Lys Asn Trp Thr Glu His Thr Phe Leu
85 90

<210> 4834
<211> 37
<212> PRT
<213> Homo sapiens

<400> 4834
Met Tyr Met Leu Val Cys Ile Cys Val Phe Ile Leu Asn Ser Tyr Ile

Met Gly Met Ser Ser Pro Ala Phe Gln Lys Gln Lys Glu Gly Gln Ser
1 5 10 15

Asp Leu Leu Val Pro Ala Phe Cys Phe Cys Phe Cys Phe Cys Phe
20 25 30

<210> 4839
<211> 15
<212> PRT
<213> Homo sapiens

<400> 4839
Met Cys Ile Phe Leu Val Ser Thr Ser Thr Leu Leu Ala Leu Pro
1 5 10 15

<210> 4840
<211> 6
<212> PRT
<213> Homo sapiens

<400> 4840
Met Ile Ser Val His Leu
1 5

<210> 4841
<211> 44
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4841
Met Cys Leu Leu Ile Val Thr Pro Gly Ile Gly Phe Leu Xaa Phe Ile
1 5 10 15

Val Arg Ile Gly Gly Ser Gly Asp Thr Xaa Xaa Val Glu Trp Arg Arg
20 25 30

Lys Asp Leu Leu Ile Ile Arg Glu Glu His Val Gly
35 40

0055003.004304

0950003 094204
T02450 000000

<210> 4850
<211> 9
<212> PRT
<213> Homo sapiens

<400> 4850
Phe Cys Thr His Ala Phe Thr Ser Glu
1 5

<210> 4851
<211> 100
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (45)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4851
Met Cys Pro Ser Ala Leu His Thr Phe Thr Pro Ala Met Xaa Ser Cys
1 5 10 15

Ala Ala Tyr Leu Gly Xaa Pro Thr Gln Cys Ser Thr Ser Xaa Pro Ala
20 25 30

Pro Leu Lys Thr Gln Ser His Met Asn Leu Ala Phe Xaa Phe Ser Asn
35 40 45

Ile Xaa Thr Ser Val Leu Leu Val Pro Thr Ser Pro Ser Pro Ala Trp
50 55 60

Arg Lys Gly Tyr Phe Gln Gly Thr Thr Val Val Gln Leu Ser Gln Val
65 70 75 80

Phe Leu Leu Ser Ile Asn His Pro Ala Ala Leu Gly Cys Pro Ala Ser
85 90 95

Gln Pro Ser Gly

100

<210> 4852
<211> 16
<212> PRT
<213> Homo sapiens

<400> 4852
Met Ala Lys Lys Val Pro Val Tyr Leu Met Pro Ser Phe Pro Cys Cys
1 5 10 15

<210> 4853
<211> 16
<212> PRT
<213> Homo sapiens

<400> 4853
Val Ala Thr Val Ser Gly Glu Gln Asn Arg Thr Thr Val Ile Leu Gly
1 5 10 15

<210> 4854
<211> 36
<212> PRT
<213> Homo sapiens

<400> 4854
Gln Gln Arg Leu Pro Trp Lys Ser Thr Thr Phe Pro Phe Phe Met Gly
1 5 10 15

Leu Ser Ser Leu Trp Glu Ser Leu Glu Ile Pro Leu Leu Phe Thr Ala
20 25 30

Thr Ser Ser Leu
35

<210> 4855
<211> 1
<212> PRT
<213> Homo sapiens

<400> 4855
Gly
1

<210> 4856

Ile His Leu
35

<210> 4864
<211> 35
<212> PRT
<213> Homo sapiens

<400> 4864
Met Trp Cys Ala Leu Gly Phe Trp Gly Arg Ala Trp Gly Ser Arg Gly
1 5 10 15
Pro Trp Ala Ala Gln Pro Gly Glu Pro Gln Pro Arg Gly Trp Ser Cys
20 25 30
Ser Gly Asn
35

<210> 4865
<211> 35
<212> PRT
<213> Homo sapiens

<400> 4865
Met Trp Cys Ala Leu Gly Phe Trp Gly Arg Ala Trp Gly Ser Arg Gly
1 5 10 15
Pro Trp Ala Ala Gln Pro Gly Glu Pro Gln Pro Arg Gly Trp Ser Cys
20 25 30
Ser Gly Asn
35

<210> 4866
<211> 35
<212> PRT
<213> Homo sapiens

<400> 4866
Met Trp Cys Ala Leu Gly Phe Trp Gly Arg Ala Trp Gly Ser Arg Gly
1 5 10 15
Pro Trp Ala Ala Gln Pro Gly Glu Pro Gln Pro Arg Gly Trp Ser Cys
20 25 30
Ser Gly Asn
35

<210> 4867
<211> 52
<212> PRT
<213> Homo sapiens

<210> 4873
 <211> 21
 <212> PRT
 <213> Homo sapiens

<400> 4873
 Ile Ser Arg Arg Cys Ile Leu Phe Asp Asn Ser Phe Ser Tyr Arg Leu
 1 5 10 15
 Pro Leu Gln Thr Thr
 20

<210> 4874
 <211> 200
 <212> PRT
 <213> Homo sapiens

<400> 4874
 Met His Ser Leu Val Leu Leu Cys Pro Leu Cys Ser Asp Pro Cys Gly
 1 5 10 15
 Val Cys Val Ala Pro Lys His Ser His Ser Gln Gly Gln Gln Pro Asp
 20 25 30
 Ser Glu Leu His Pro Pro Cys Leu Pro His Thr Leu Leu Ser Leu Phe
 35 40 45
 Leu Ala Leu His Arg Pro Pro Gln Pro Cys His Leu Pro Pro Leu Thr
 50 55 60
 Asp His Leu Cys Ser Cys Val His Ser Gly Cys Val Phe Cys Arg Ala
 65 70 75 80
 Phe Gln Ala Ile Arg Pro Glu Ser Arg Ile Arg Lys Trp Met Gly Pro
 85 90 95
 Gln Lys Thr Asn Ser Val Val Phe Leu Cys Ser Phe Thr Gln Val Thr
 100 105 110
 Leu Cys Gly Ile Trp Leu Gly Thr Glu Pro Pro Phe Val Asn Lys Asp
 115 120 125
 Pro Gln Phe Met Pro Gly Tyr Ile Ile Ile Gln Cys Asn Glu Gly Ser
 130 135 140
 Val Thr Ala Phe Tyr Ser Val Leu Gly Tyr Leu Gly Phe Leu Val Leu
 145 150 155 160
 Gly Ser Leu Ala Val Ala Phe Leu Ala Arg Asn Leu Pro Asp Ala Phe
 165 170 175
 Asn Glu Ala Lys Phe Leu Thr Phe Ser Met Leu Val Ser Cys Ser Val
 180 185 190
 Trp Val Ala Phe Leu Pro Ser Tyr
 195 200

<400> 4878

Met Ser Phe Tyr Arg Leu Val His Ser Asn Gln Asp Leu Asn Ser Leu
1 5 10 15

Arg Gly Leu Leu Met Glu Phe Val Phe Leu Phe His Leu Phe Gln Ser
20 25 30

Lys Ala Val Phe Pro Ser Phe Ser Phe Pro Cys Cys Cys Leu Val Glu
35 40 45

Ile Gln Ser Ser Ile Gln
50

<210> 4879

<211> 76

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (51)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4879

Met Pro Ile Pro Phe Pro Gly Glu Gln Val His Leu Pro Phe Leu Ser
1 5 10 15

Leu Leu Ala His Trp His Gln Thr Gln Leu Pro Ser Lys Gly Pro Leu
20 25 30

Ala Ser Arg Ala Gln Ile Gln Pro Phe Ser Gln Glu Pro Leu Gly His
35 40 45

Leu Ala Xaa Thr Gln Leu Thr Ser Gln Gly Pro Leu Ala Cys Arg Val
50 55 60

Gln Val Gln Leu Pro Ser Gln Gly Leu Leu Ala His
65 70 75

<210> 4880

<211> 38

<212> PRT

<213> Homo sapiens

<400> 4880

Met Ile His Ser Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu
1 5 10 15

Ile Leu Leu Arg Ile Ser Ile Ser Arg Leu Thr Gly Thr Asn Thr Leu
20 25 30

Val Phe Asn Leu Ile Leu
35

35

40

45

Lys Ser Phe Ser Lys
50

<210> 4885
<211> 17
<212> PRT
<213> Homo sapiens

<400> 4885
Met Trp Leu Ser Arg Glu Val Leu Val Leu Ile Ser Ile Ser Ala Ser
1 5 10 15

Gly

<210> 4886
<211> 20
<212> PRT
<213> Homo sapiens

<400> 4886
Met Asn Pro Cys Phe Phe Ser Val Leu Val Leu Leu Pro Glu Leu Ala
1 5 10 15

Leu Gln Trp Lys
20

<210> 4887
<211> 30
<212> PRT
<213> Homo sapiens

<400> 4887
Met Leu Leu Cys Phe Met Arg Ile Lys Ile Pro Ala Leu Leu Cys Leu
1 5 10 15

Trp Tyr Leu Pro Leu His Ile Leu Val Met Ala Trp Glu Val
20 25 30

<210> 4888
<211> 33
<212> PRT
<213> Homo sapiens

<400> 4888
Met Pro Leu Leu Leu Arg Trp Val Ser Trp Leu Gln Val Trp Lys Pro
1 5 10 15

Arg Pro Pro Leu Ser Arg Arg Arg Lys Thr Ser Gln Leu Lys Pro Arg
20 25 30

[illegible]

<400> 4889															
Glu 1	Ile	Leu	Glu	Arg 5	Pro	Ala	Gln	Leu	Ala 10	Asn	Ala	Arg	Glu	Thr 15	Pro
His	Ser	Pro	Gly 20	Val	Glu	Asp	Ala	Pro 25	Ile	Ala	Lys	Val	Gly 30	Val	Leu
Ala	Ala	Ser 35	Met	Glu	Ala	Lys	Ala 40	Ser	Ser	Gln	Gln	Glu 45	Lys	Glu	Asp
Lys	Pro 50	Ala	Glu	Thr	Lys	Lys 55	Leu	Arg	Ile	Ala	Trp 60	Pro	Pro	Pro	Thr
Glu 65	Leu	Gly	Ser	Ser	Gly 70	Ser	Ala	Leu	Glu	Glu 75	Gly	Ile	Lys	Met	Ser 80
Lys	Pro	Lys	Trp	Pro 85	Pro	Glu	Asp	Glu	Ile 90	Ser	Lys	Pro	Glu	Val 95	Pro
Glu	Asp	Val	Asp 100	Leu	Asp	Leu	Lys	Lys 105	Leu	Arg	Arg	Ser	Ser 110	Ser	Leu
Lys	Glu	Arg 115	Ser	Arg	Pro	Phe	Thr 120	Val	Ala	Ala	Ser	Phe 125	Gln	Ser	Thr
Ser	Val 130	Lys	Ser	Pro	Lys	Thr 135	Val	Ser	Pro	Pro	Ile 140	Arg	Lys	Gly	Trp
Ser 145	Met	Ser	Glu	Gln 150	Ser	Glu	Glu	Ser	Val	Gly 155	Gly	Arg	Val	Ala	Glu 160
Arg	Lys	Gln	Val	Glu 165	Asn	Ala	Lys	Ala	Ser 170	Lys	Lys	Asn	Gly	Asn 175	Val
Gly	Lys	Thr	Thr 180	Trp	Gln	Asn	Lys	Glu 185	Ser	Lys	Gly	Glu	Thr 190	Gly	Lys
Arg	Ser	Lys 195	Glu	Gly	His	Ser	Leu 200	Glu	Met	Glu	Asn	Glu 205	Asn	Leu	Val
Glu	Asn 210	Gly	Ala	Asp	Ser	Asp 215	Glu	Asp	Asp	Asn	Ser 220	Phe	Leu	Lys	Gln
Gln 225	Ser	Pro	Pro	Arg	Asn 230	Pro	Ser	Leu							

```
<210> 4890
<211> 49
<212> PRT
```

<213> Homo sapiens

<400> 4890

Met His Leu Phe Ile Cys Thr Leu Trp Asn Ile Phe Cys Asn Lys Pro
1 5 10 15

Val Ser Trp Ser Ser Val Ser Cys Ser Asn Lys Phe Ile Lys Pro Lys
20 25 30

Glu Gly Val Val Gly Ile Pro Ile Tyr Arg Arg Leu Val Arg Ser Thr
35 40 45

Ser

<210> 4891

<211> 20

<212> PRT

<213> Homo sapiens

<400> 4891

Met Ile Leu Ser Thr Asn Leu Phe Thr Asp Leu Phe Ile Leu Phe Leu
1 5 10 15

Val Leu His Ser
20

<210> 4892

<211> 12

<212> PRT

<213> Homo sapiens

<400> 4892

Met Ala His Pro Asn Arg Ile Leu Leu Val Pro Trp
1 5 10

<210> 4893

<211> 35

<212> PRT

<213> Homo sapiens

<400> 4893

Met Thr Lys Ile Val Asn Thr Ser Leu Phe Leu Ala Ser Val Thr Ile
1 5 10 15

Ile Val Ser Ala Thr Ser Gly Val Glu Gln Pro Ser Thr Gln Arg Ser
20 25 30

Leu Ala Phe
35

<210> 4894

<211> 66

<212> PRT
<213> Homo sapiens

<400> 4894
Met Phe Leu Cys Gly Phe Phe Val Val Val Phe Val Trp Gly Gly Gly
1 5 10 15
Lys Tyr Arg Val Ile His Glu Gln Asp Ile Ser Leu Leu Ser Lys Ser
20 25 30
Leu Gly Ser Arg Cys Gly Ser Glu Met Ala Trp Glu Gly Pro Cys Gly
35 40 45
Gln Trp Phe Tyr Leu Phe Phe Leu Ser Leu Leu Ile Ser Gly Leu Leu
50 55 60
Arg Phe
65

<210> 4895
<211> 30
<212> PRT
<213> Homo sapiens

<400> 4895
Met Leu Ser Ser Val Met Leu Leu Ser Val Leu Gln Val His Leu His
1 5 10 15
Leu Arg Ala Glu Leu His Leu Leu Pro Leu Pro Leu Gln Arg
20 25 30

<210> 4896
<211> 29
<212> PRT
<213> Homo sapiens

<400> 4896
Val Asn Leu Asp His Leu Val Lys Val Val Phe Ala Arg Phe Leu His
1 5 10 15
Tyr Lys Val Asn Ile Phe Pro Phe Pro Tyr Tyr Phe Leu
20 25

<210> 4897
<211> 38
<212> PRT
<213> Homo sapiens

<400> 4897
Met Cys Glu Ala Arg Gln Leu Leu Val Leu Gln Leu Leu Cys Gly Lys
1 5 10 15
Gln Lys Pro Phe Cys Ser Val Pro Gln Pro Ala Phe Val Ser Arg Ile
20 25 30

Glu Glu Leu Phe His Lys
35

<210> 4898
<211> 17
<212> PRT
<213> Homo sapiens

<400> 4898
Met Lys Ile Arg Lys Arg Arg Asn Trp Ala Ser Trp Arg Ile Ser Val
1 5 10 15

Val

<210> 4899
<211> 24
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4899
Met Val Ile Ile Phe Ile Leu Tyr Ile Leu Cys Ile Pro Val Ile Lys
1 5 10 15

Cys Arg Val Leu Xaa Ser Ile Ile
20

<210> 4900
<211> 6
<212> PRT
<213> Homo sapiens

<400> 4900
Ile Val Leu Trp Leu Gln
1 5

<210> 4901
<211> 41
<212> PRT
<213> Homo sapiens

<400> 4901
Met Glu Ile Ser Ala Val Thr Leu Gly Leu Leu Ile Arg Ser Val Trp
1 5 10 15

Gly Gly Ala Gln Glu Ser Ala Phe Leu Ile Arg Ser Pro Ala Pro Leu
20 25 30

Pro His Tyr Ser Ser Ala Lys Arg Ser
35 40

<210> 4902
<211> 29
<212> PRT
<213> Homo sapiens

<400> 4902
Met Ala Val Gly Leu Val Val Phe Phe Thr Thr Phe Leu Thr Pro Ala
1 5 10 15

Ala Tyr Val Leu Gly Asn Leu Lys Gln Phe Arg Arg Asn
20 25

<210> 4903
<211> 11
<212> PRT
<213> Homo sapiens

<400> 4903
Met Gly Lys Arg His Arg Gly Lys Arg Met Val
1 5 10

<210> 4904
<211> 24
<212> PRT
<213> Homo sapiens

<400> 4904
Met Lys Glu Glu Leu Trp Ser Val Phe Arg Trp Val Ile Ile Leu Leu
1 5 10 15

Gln Cys Arg Ile Leu Met Leu Pro
20

<210> 4905
<211> 40
<212> PRT
<213> Homo sapiens

<400> 4905
Met Ile Val Leu Gly Trp Met Phe Phe Val Gly Leu Val Cys Tyr Met
1 5 10 15

Gly Thr Phe Pro Glu Leu Met Glu Pro Cys Gly Arg Asp Ile Asn Ile
20 25 30

Pro Gln Glu Gly Leu Gln Trp Lys
35 40

<210> 4906
<211> 17
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4906
Met Leu Ser Gly Trp Leu Phe Trp Leu Leu Trp Xaa Ser Cys Ile Ser
1 5 10 15

Arg

<210> 4907
<211> 37
<212> PRT
<213> Homo sapiens

<400> 4907
Met Phe Leu Ala Val Leu Leu Leu Ile Leu Met Leu Phe Leu Ile Leu
1 5 10 15

Val Tyr His Gln Val Tyr Ile Ser His Gly Glu Lys Lys Ile Gly Leu
20 25 30

Met Tyr Gln Gly Pro
35

<210> 4908
<211> 33
<212> PRT
<213> Homo sapiens

<400> 4908
Met Val Glu Asp Gln Glu Met His Leu Thr Ser Ser Val Met Pro Asp
1 5 10 15

Met Val Ser His Phe Gly Phe Leu Gly Ala Ile Gly Trp Glu Lys Pro
20 25 30

Glu

<210> 4909
<211> 44
<212> PRT
<213> Homo sapiens

<400> 4909
Met Phe Phe Gly Leu Leu Leu Met Ile Leu Phe Thr Leu Cys Gln Ile
1 5 10 15

Leu Ser Cys Arg Leu Phe Tyr Asn Ser Thr Phe Lys Lys Asn Val Tyr
 20 25 30

Ala Asn Leu Leu Ser Ile Phe Met Ser Ile Phe Ile
 35 40

<210> 4910
 <211> 31
 <212> PRT
 <213> Homo sapiens

<400> 4910
 Met Phe Cys Val Val Val Leu Ser Leu Glu Ala Thr Gly Tyr Gly Arg
 1 5 10 15
 Phe Thr Phe Thr Gly Gly Pro Leu Met Thr Thr Ala Pro Ser Thr
 20 25 30

<210> 4911
 <211> 35
 <212> PRT
 <213> Homo sapiens

<400> 4911
 Met Ser Trp Cys Leu Asp Leu Arg Thr Thr Gln Arg Thr Leu Thr Ile
 1 5 10 15
 Pro Ala Leu Val His Thr Thr Gln Arg Arg Ser His Arg Gln Lys Leu
 20 25 30

Pro Gly Gln
 35

<210> 4912
 <211> 322
 <212> PRT
 <213> Homo sapiens

<400> 4912
 Met Glu Ala Ser Ala Ala Ala Val Phe Ser His Phe Ile Met Lys Phe
 1 5 10 15

Pro Trp Gln Trp Ala Phe Leu Leu Gly Phe Val Leu Gly Ala Val Ser
 20 25 30

Pro Ala Val Val Val Pro Tyr Met Met Val Leu Gln Glu Asn Gly Tyr
 35 40 45

Gly Val Glu Glu Gly Ile Pro Thr Leu Leu Met Ala Ala Ser Ser Met
 50 55 60

Asp Asp Ile Leu Ala Ile Thr Gly Phe Asn Thr Cys Leu Ser Ile Val
 65 70 75 80

Year	Age	Sex	Occupation	Education	Income	Health	Family	Community	Environment	Policy	Program	Impact	Outcome	Conclusion
2010	18-24	Male	Student	High School	\$10,000	Good	2 Children	Urban	Indoor	Low	None	0.5	1.0	1.5
2010	25-34	Female	Teacher	College	\$20,000	Good	1 Child	Urban	Indoor	Low	None	0.5	1.0	1.5
2010	35-44	Male	Engineer	College	\$30,000	Good	2 Children	Urban	Indoor	Low	None	0.5	1.0	1.5
2010	45-54	Female	Manager	College	\$40,000	Good	1 Child	Urban	Indoor	Low	None	0.5	1.0	1.5
2010	55-64	Male	Retired	High School	\$15,000	Good	2 Children	Urban	Indoor	Low	None	0.5	1.0	1.5
2010	65-74	Female	Retired	High School	\$15,000	Good	1 Child	Urban	Indoor	Low	None	0.5	1.0	1.5
2010	75-84	Male	Retired	High School	\$15,000	Good	2 Children	Urban	Indoor	Low	None	0.5	1.0	1.5
2010	85-94	Female	Retired	High School	\$15,000	Good	1 Child	Urban	Indoor	Low	None	0.5	1.0	1.5
2010	95-104	Male	Retired	High School	\$15,000	Good	2 Children	Urban	Indoor	Low	None	0.5	1.0	1.5
2010	105-114	Female	Retired	High School	\$15,000	Good	1 Child	Urban	Indoor	Low	None	0.5	1.0	1.5
2010	115-124	Male	Retired	High School	\$15,000	Good	2 Children	Urban	Indoor	Low	None	0.5	1.0	1.5
2010	125-134	Female	Retired	High School	\$15,000	Good	1 Child	Urban	Indoor	Low	None	0.5	1.0	1.5
2010	135-144	Male	Retired	High School	\$15,000	Good	2 Children	Urban	Indoor	Low	None	0.5	1.0	1.5
2010	145-154	Female	Retired	High School	\$15,000	Good	1 Child	Urban	Indoor	Low	None	0.5	1.0	1.5
2010	155-164	Male	Retired	High School	\$15,000	Good	2 Children	Urban	Indoor	Low	None	0.5	1.0	1.5
2010	165-174	Female	Retired	High School	\$15,000	Good	1 Child	Urban	Indoor	Low	None	0.5	1.0	1.5
2010	175-184	Male	Retired	High School	\$15,000	Good	2 Children	Urban	Indoor	Low	None	0.5	1.0	1.5
2010	185-194	Female	Retired	High School	\$15,000	Good	1 Child	Urban	Indoor	Low	None	0.5	1.0	1.5
2010	195-204	Male	Retired	High School	\$15,000	Good	2 Children	Urban	Indoor	Low	None	0.5	1.0	1.5
2010	205-214	Female	Retired	High School	\$15,000	Good	1 Child	Urban	Indoor	Low	None	0.5	1.0	1.5
2010	215-224	Male	Retired	High School	\$15,000	Good	2 Children	Urban	Indoor	Low	None	0.5	1.0	1.5
2010	225-234	Female	Retired	High School	\$15,000	Good	1 Child	Urban	Indoor	Low	None	0.5	1.0	1.5
2010	235-244	Male	Retired	High School	\$15,000	Good	2 Children	Urban	Indoor	Low	None	0.5	1.0	1.5
2010	245-254	Female	Retired	High School	\$15,000	Good	1 Child	Urban	Indoor	Low	None	0.5	1.0	1.5
2010	255-264	Male	Retired	High School	\$15,000	Good	2 Children	Urban	Indoor	Low	None	0.5	1.0	1.5
2010	265-274	Female	Retired	High School	\$15,000	Good	1 Child	Urban	Indoor	Low	None	0.5	1.0	1.5
2010	275-284	Male	Retired	High School	\$15,000	Good	2 Children	Urban	Indoor	Low	None	0.5	1.0	1.5
2010	285-294	Female	Retired	High School	\$15,000	Good	1 Child	Urban	Indoor	Low	None	0.5	1.0	1.5
2010	295-304	Male	Retired	High School	\$15,000	Good	2 Children	Urban	Indoor	Low	None	0.5	1.0	1.5
2010	305-314	Female	Retired	High School</										

Asp Leu Glu Met Lys
20

<400> 4915
Met His Gln Leu Leu Gln Leu Gln Arg Gln Glu Pro Cys Arg Leu Leu
1 5 10 15

Ser Pro Ser Pro Gln Pro Gly Leu His His Leu Cys Phe Gln Gln Ile
20 25 30

Glu Leu Leu Leu Leu Leu Leu His Leu Gln Trp Gly Leu Gly Leu Leu
35 40 45

Arg Gln Leu His His Lys Arg Leu Ala Gln Leu Leu Leu His Arg Arg
50 55 60

Arg Asp His Pro Ile Pro Pro Ile Gln Asp Ile Leu Gly Ile Ala Lys
65 70 75 80

Cys Pro Cys Pro Trp Ala Ile Ile Leu Met Arg Met Ala Ser Ile Ile
85 90 95

Cys His Ile His Gln Cys Ile Thr Arg Val Leu Asp Arg Leu Xaa Thr
100 105 110

Arg Asp Pro Ser Ser Leu His Thr Pro Ser Leu Ser Pro His Ser Ser
115 120 125

Leu Thr Ile His Ser Ser Asn Met Ser Ala Gln Gln Leu Ser
130 135 140

2226

[illegible]

```
<210> 4927
<211> 15
<212> PRT
<213> Homo sapiens
```

```
<210> 4928
<211> 22
<212> PRT
<213> Homo sapiens
```

```
<210> 4929
<211> 39
<212> PRT
<213> Homo sapiens
```

```
<210> 4930
<211> 44
<212> PRT
```


<212> PRT
<213> Homo sapiens

<400> 4934
Met Phe Leu Leu Phe Leu Arg Ser Leu Pro Tyr Ile Leu Cys Ile Val
1 5 10 15
Lys Pro Phe Leu Lys Ser Asn Asp Leu Gly Lys Pro Thr Leu Val Cys
20 25 30

<210> 4935
<211> 14
<212> PRT
<213> Homo sapiens

<400> 4935
Met Phe Glu Gly Pro Gly Arg Ala Val Ala Cys Leu Cys Leu
1 5 10

<210> 4936
<211> 20
<212> PRT
<213> Homo sapiens

<400> 4936
Met Cys Trp Leu Ala Ala Lys Asn Leu Leu Glu Cys Lys Tyr Ala Ser
1 5 10 15
Leu His His Leu
20

<210> 4937
<211> 39
<212> PRT
<213> Homo sapiens

<400> 4937
Met Trp Leu Lys Ile Gly Phe Leu Ser Ile Phe Ser Leu Val Leu Phe
1 5 10 15
Tyr Lys Thr Ser Leu Ser Thr Tyr His Val Pro Tyr Ser Leu Val Gly
20 25 30
Pro Glu Asp Lys Glu Met Tyr
35

<210> 4938
<211> 12
<212> PRT
<213> Homo sapiens

<400> 4938

Met Ala Ala Ser Met His Gln Cys Phe Pro Leu Thr
1 5 10

<210> 4939

<211> 37

<212> PRT

<213> Homo sapiens

<400> 4939

Met Met Cys Phe Leu Gly Ala Gly Cys Ile Glu Phe Lys Thr Trp Thr
1 5 10 15

Met Ala Trp Ile Ala Trp Val Gln Ile Leu Pro Leu Leu Tyr His Phe
20 25 30

Arg Gln Ala Gly Pro
35

<210> 4940

<211> 23

<212> PRT

<213> Homo sapiens

<400> 4940

Met Glu Val Gly Val Ser Leu Leu Cys Arg Ile Trp Asp Trp Ala Asn
1 5 10 15

Val Cys Val Ala Ser Leu Asn
20

<210> 4941

<211> 7

<212> PRT

<213> Homo sapiens

<400> 4941

Ser Phe Lys Leu Leu Ile Thr
1 5

<210> 4942

<211> 72

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (43)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4942

Met Pro Ala Cys Gly Ser Leu Pro Pro Arg Ala His Gln Pro Trp Cys

1 5 10 15
Pro Ala Gly Leu Leu Gln Ser Leu Val Leu Glu Gln Leu Leu Glu Phe
20 25 30
Ser Ala Ala Ser Ser Pro Gln Pro Ser Arg Xaa Ser Glu Leu Leu Pro
35 40 45
Gly Gln His Leu Leu Gly Pro Val Leu Arg Pro His Gly Ala Gly Leu
50 55 60
Met Trp Glu Leu Ile Leu Ala Gly
65 70

<210> 4943
<211> 21
<212> PRT
<213> Homo sapiens

<400> 4943
Met Ala Phe Leu Lys Gly Trp Leu Pro Phe Cys Trp Ser Gln Arg Ser
1 5 10 15
Ile His Ser Tyr Leu
20

<210> 4944
<211> 80
<212> PRT
<213> Homo sapiens

<400> 4944
Ile Gly His Ile Met Leu Leu Val Phe Pro Lys Cys Leu Val Ile Phe
1 5 10 15
Tyr Cys Ser Phe Asn Tyr Arg Leu His Phe Phe Val Cys Leu Phe Leu
20 25 30
Leu Ser Ser Gln Met Leu Pro Asn Met Ala Ala Ser Asn Pro Glu Phe
35 40 45
Asn Pro Gly Thr Ile Leu Gln Thr Ala Gln Phe Ser Ser Glu Trp Ala
50 55 60
Ile Cys Ile Pro Thr His Gln Ser Tyr Tyr Leu Lys Asn Tyr Ile Phe
65 70 75 80

<210> 4945
<211> 67
<212> PRT
<213> Homo sapiens

0
0
0
7
0
0
0
6

2
0
0
4
7
0
4

<220>
 <221> SITE .
 <222> (15)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <400> 4948
 Gly Pro Gly Xaa Glu Val Ile Glu Ser Trp Glu Pro Ser Leu Xaa Leu
 1 5 10 15

 Cys Cys Ser Gly Gly Gly Glu
 20

<210> 4949
 <211> 92
 <212> PRT
 <213> Homo sapiens

 <400> 4949
 Met Pro Phe Gln Phe Pro Lys Lys Ala Arg Leu Val Pro Leu Leu Gly
 1 5 10 15

 Leu Cys Leu Glu Tyr Ser Gln Thr Leu Ser Arg Ala Pro Ala Trp Met
 20 25 30

 Ser Val Ser Arg Gly Pro Pro His Ser Thr Trp Ile Lys Ala Gly Leu
 35 40 45

 Pro Gly Ala Leu His His Thr Pro Phe Pro Pro Ser Ala Cys Leu Ala
 50 55 60

 Arg Pro Ala Arg Ser Phe His Asp Gly Arg Ala Trp Pro Leu Leu His
 65 70 75 80

 Ala Met Gln Ala Trp Pro Leu Pro Thr Thr Gly Pro
 85 90

<210> 4950
 <211> 27
 <212> PRT
 <213> Homo sapiens

 <400> 4950
 Met Phe Tyr Trp Gln Arg Leu Gly Leu Ala Leu Leu Ala Ser Val Leu
 1 5 10 15

 Gly Phe Phe Leu Cys Thr Ala Asp Trp Leu Ser
 20 25

<210> 4951
 <211> 33
 <212> PRT
 <213> Homo sapiens

 <400> 4951

Met Cys Gly Ser Cys Trp Ala Phe Ser Val Thr Gly Asn Val Glu Gly
 1 5 10 15
 Gln Trp Phe Leu Asn Gln Gly Thr Leu Leu Ser Leu Ser Glu Gln Glu
 20 25 30
 Leu Leu Asp Cys Asp Lys Met Asp Lys Ala Cys Met Gly Gly Leu Pro
 35 40 45
 Ser Asn Ala Tyr Ser Ala Ile Lys Asn Leu Gly Gly Leu Glu Thr Glu
 50 55 60
 Asp Asp Tyr Ser Tyr Gln Gly His Met Gln Ser Cys Asn Phe Ser Ala
 65 70 75 80
 Glu Lys Ala Lys Val Tyr Ile Asn Asp Ser Val Glu Leu Ser Gln Asn
 85 90 95
 Glu Gln Lys Leu Ala Ala Trp Leu Ala Lys Arg Gly Pro Ile Ser Val
 100 105 110
 Ala Ile Asn Ala Phe Gly Met Gln Phe Tyr Arg His Gly Ile Ser Arg
 115 120 125
 Pro Leu Arg Pro Leu Cys Ser Pro Trp Leu Ile Asp His Ala Val Leu
 130 135 140
 Leu Val Gly Tyr Gly Asn Arg Ser Asp Val Pro Phe Trp Ala Ile Lys
 145 150 155 160
 Asn Ser Trp Gly Thr Asp Trp Gly Glu Lys Gly Tyr Tyr Tyr Leu His
 165 170 175
 Arg Gly Ser Gly Ala Cys Gly Val Asn Thr Met Ala Ser Ser Ala Val
 180 185 190
 Val Asp

<210> 4954
 <211> 232
 <212> PRT
 <213> Homo sapiens

<400> 4954
 Met Leu Ser Thr His Asn Leu Pro Cys Leu Leu Val Glu Leu Leu Glu
 1 5 10 15
 His Ser Pro Trp Ser Arg Arg Glu Gly Gly Lys Leu Gln Gln Phe Glu
 20 25 30
 Gly Ser Arg Trp His Thr Val Ala Pro Ser Glu Gln Gln Lys Leu Ser
 35 40 45
 Lys Leu Asp Gly Gln Val Trp Ile Ala Leu Tyr Asn Leu Leu Leu Ser
 50 55 60
 Pro Glu Ala Gln Ala Arg Tyr Cys Leu Thr Ser Phe Ala Lys Gly Arg
 65 70 75 80

163159'60000000

Pro Met Arg Leu Gln Ala His Val Leu Gly Gln Leu Lys Pro Val Cys
85 90 95

Tyr Val Ala Pro Ser Leu Cys Asp Thr His Val Gly Cys Leu Ser Ala
100 105 110

Ser Asp Lys Leu Ala Arg Trp Ala Val Leu Gly Leu Gly Gly Ala Leu
115 120 125

Leu Ala His Leu Val Ser Pro Leu Tyr Ser Thr Ser Leu Ile Leu Val
130 135 140

Pro Pro Trp Gly Leu Pro Pro Val Ser Ala Arg Pro Pro Phe Ser Gly
145 150 155 160

Pro Phe Thr Arg Arg Pro Gly Leu Trp Gly Ser Pro Thr Ser Trp Pro
165 170 175

<210> 4959
<211> 8
<212> PRT
<213> Homo sapiens

<400> 4959
Met Ser Glu Gly Leu Leu Cys Leu
1 5

<210> 4960
<211> 170
<212> PRT
<213> Homo sapiens

<400> 4960
Met Ile Leu Thr Met Leu Leu Met Leu Lys Leu Cys Thr Glu Val Arg
1 5 10 15

Val Ala Asn Glu Leu Asn Ala Arg Arg Arg Ser Phe Thr Asp Phe Asp
20 25 30

Pro His His Phe Trp Gln Trp Ser Ser Phe Ser Asp Tyr Val Gln Cys
35 40 45

Val Leu Ala Phe Thr Gly Val Ala Gly Tyr Ile Thr Tyr Leu Ser Ile
50 55 60

Asp Ser Ala Leu Phe Val Glu Thr Leu Gly Phe Leu Ala Val Leu Thr
65 70 75 80

Glu Ala Met Leu Gly Val Pro Gln Leu Tyr Arg Asn His Arg His Gln
85 90 95

Ser Thr Glu Gly Met Ser Ile Lys Met Val Leu Met Trp Thr Ser Gly
100 105 110

0555003-097304

Asp Ala Phe Lys Thr Ala Tyr Phe Leu Leu Lys Gly Ala Pro Leu Gln
115 120 125

Phe Ser Val Cys Gly Leu Leu Gln Val Leu Val Asp Leu Ala Ile Leu
130 135 140

Gly Gln Ala Tyr Ala Phe Ala Arg His Pro Gln Lys Pro Ala Pro His
145 150 155 160

Ala Val His Pro Thr Gly Thr Lys Ala Leu
165 170

<210> 4961

<211> 13

<212> PRT

<213> Homo sapiens

<400> 4961

Met Ala Ser Leu Cys Ser Cys Leu Thr Ala Leu Met Cys
1 5 10

<210> 4962

<211> 13

<212> PRT

<213> Homo sapiens

<400> 4962

Met Ala Ser Leu Cys Ser Cys Leu Thr Ala Leu Met Cys
1 5 10

<210> 4963

<211> 152

<212> PRT

<213> Homo sapiens

<400> 4963

Met Gln Gly Thr Pro Gly Gly Gly Thr Arg Pro Gly Pro Ser Pro Val
1 5 10 15

Asp Arg Arg Thr Leu Leu Val Phe Ser Phe Ile Leu Ala Ala Ala Leu
20 25 30

Gly Gln Met Asn Phe Thr Gly Asp Gln Val Leu Arg Val Leu Ala Lys
35 40 45

Asp Glu Lys Gln Leu Ser Leu Leu Gly Asp Leu Glu Gly Leu Lys Pro
50 55 60

Gln Lys Val Asp Phe Trp Arg Gly Pro Ala Arg Pro Ser Leu Pro Val
65 70 75 80

Asp Met Arg Val Pro Phe Ser Glu Leu Lys Asp Ile Lys Ala Tyr Leu
85 90 95

Glu Ser His Gly Leu Ala Tyr Ser Ile Met Ile Lys Asp Ile Gln Val
100 105 110

Leu Leu Asp Glu Glu Arg Gln Ala Met Ala Lys Ser Arg Arg Leu Glu
115 120 125

Arg Ser Thr Asn Ser Phe Ser Tyr Ser Ser Tyr His Thr Leu Glu Arg
130 135 140

Tyr Ile Ala Gly Leu Thr Thr Leu
145 150

<210> 4964
<211> 75
<212> PRT
<213> Homo sapiens

<400> 4964
Met Ser Ser Trp Leu Arg Val Val Asn Ala Ala Ile Ala Thr Ala Ser
1 5 10 15

Ser Ala Ser Gly Glu Pro Glu Glu Pro Val Val Pro Ser Thr Thr Arg
20 25 30

Gly Met Thr Arg Ala Met Thr Met Pro Pro Val Ser Pro Val Gly Ala
35 40 45

Glu Gly Pro Val Val Leu Arg Ser Lys Asp Gly Arg Glu Arg Glu Arg
50 55 60

Glu Lys Arg Phe Ser Phe Phe Lys Lys Asn Lys
65 70 75

<210> 4965
<211> 35
<212> PRT
<213> Homo sapiens

<400> 4965
Met Trp Leu Ile Ala Pro Leu Cys Leu Leu Pro Val Ser Val Ala Gly
1 5 10 15

Glu Leu Asn Arg Ala Leu Gly Leu Ser Ser Leu Cys Gly Glu Thr Asp
20 25 30

Ile Tyr Gln
35

<210> 4966
<211> 314
<212> PRT
<213> Homo sapiens

<400> 4966
Met Val Lys Leu Leu Val Ala Lys Ile Leu Cys Met Val Gly Val Phe

<210> 4967
 <211> 174
 <212> PRT
 <213> Homo sapiens

<400> 4967
 Met Thr Phe Leu Leu Met Leu Leu Leu Ile Phe Phe Tyr Ile Phe Ala
 1 5 10 15
 Val Thr Gly Val Tyr Val Phe Ser Glu Tyr Thr Arg Ser Pro Arg Gln
 20 25 30
 Asp Leu Glu Tyr His Val Phe Phe Ser Asp Leu Pro Asn Ser Leu Val
 35 40 45
 Thr Val Phe Ile Leu Phe Thr Leu Asp His Trp Tyr Ala Leu Leu Gln
 50 55 60
 Asp Val Trp Lys Val Pro Glu Val Ser Arg Ile Phe Ser Ser Ile Tyr
 65 70 75 80
 Phe Ile Leu Trp Leu Leu Leu Gly Ser Ile Ile Phe Arg Ser Ile Ile
 85 90 95
 Val Ala Met Met Val Thr Asn Phe Gln Asn Ile Arg Lys Glu Leu Asn
 100 105 110
 Glu Glu Met Ala Arg Arg Glu Val Gln Leu Lys Ala Asp Met Phe Lys
 115 120 125
 Arg Gln Ile Ile Gln Arg Arg Lys Asn Met Ser His Glu Ala Leu Thr
 130 135 140
 Ser Ser His Ser Lys Ile Glu Asp Arg Ser Phe Gly Leu Gly Asp Ser
 145 150 155 160
 Cys Ala Arg Lys Ser Ala Arg Ala Asn Gly Asn Gly Ser Gly
 165 170

<210> 4968
 <211> 170
 <212> PRT
 <213> Homo sapiens

<400> 4968
 Met Pro Ile Pro Ala Ser Pro Leu His Pro Pro Leu Pro Ser Leu Leu
 1 5 10 15
 Leu Tyr Leu Leu Leu Glu Leu Ala Gly Val Thr His Val Phe His Val
 20 25 30
 Gln Gln Thr Glu Met Ser Gln Thr Val Ser Thr Gly Glu Ser Ile Ile
 35 40 45
 Leu Ser Cys Ser Val Pro Asn Thr Leu Pro Asn Gly Pro Val Leu Trp
 50 55 60
 Phe Lys Gly Thr Gly Pro Asn Arg Lys Leu Ile Tyr Asn Phe Lys Gln
 65 70 75 80

<212> PRT
<213> Homo sapiens

<400> 4972

Met Gly Lys Glu Ala Ala Asp Leu Leu Leu Leu Leu Leu Pro Val Ala
1 5 10 15
Ser Ser Gly Cys Gln Glu Arg Gly Arg Thr Phe Val Trp Ala Leu Pro
20 25 30
Arg Ala Gly Asn Phe Thr Trp Tyr Leu Lys Val Ser Phe Gly Ile Arg
35 40 45
Pro Glu Thr Leu Gly Phe Ser Arg Leu Thr Thr Pro Phe Tyr Ser Lys
50 55 60
His Leu Glu Asp Cys Phe Arg Val Ser Gln Gly Pro Ser Val Pro Ser
65 70 75 80
Ala Val Glu Cys Arg Thr Leu Cys Asp Ile Leu Tyr Pro Phe Phe Pro
85 90 95
Gly Leu Val Ala Met Glu Gly Leu Val Cys Cys Asp Ser Thr Leu Asp
100 105 110
Ala Val Ser Leu Met Leu Ala Arg Glu Ala Glu Asp Val Arg Gly Arg
115 120 125
Gly Arg Leu Leu Gly Leu Ser Ser Phe Leu Cys Ile Ile Leu Gly Leu
130 135 140
Ala Trp Thr Ala Pro Ala Ser Glu Ser Cys Gly Pro His Pro Leu Ala
145 150 155 160
Ala Glu Pro Ser Thr Val Ile Leu Gly Ala Ile Phe Pro Cys Arg Thr
165 170 175
Gly Ser Leu Ser Pro Ala Pro Thr Phe Gly Leu
180 185

<210> 4973
<211> 187
<212> PRT
<213> Homo sapiens

<400> 4973

Met Gly Lys Glu Ala Ala Asp Leu Leu Leu Leu Leu Leu Pro Val Ala
1 5 10 15
Ser Ser Gly Cys Gln Glu Arg Gly Arg Thr Phe Val Trp Ala Leu Pro
20 25 30
Arg Ala Gly Asn Phe Thr Trp Tyr Leu Lys Val Ser Phe Gly Ile Arg
35 40 45
Pro Glu Thr Leu Gly Phe Ser Arg Leu Thr Thr Pro Phe Tyr Ser Lys
50 55 60
His Leu Glu Asp Cys Phe Arg Val Ser Gln Gly Pro Ser Val Pro Ser

Ala Glu Pro Ser Thr Val Ile Leu Gly Ala Ile Phe Pro Cys Arg Thr
165 170 175

Gly Ser Leu Ser Pro Ala Pro Thr Phe Gly Leu
180 185

<210> 4975

<211> 314

<212> PRT

<213> Homo sapiens

<400> 4975

Met Gly Ala Arg Gly Ala Leu Leu Leu Ala Leu Leu Leu Ala Arg Ala
1 5 10 15

Gly Leu Arg Lys Pro Glu Ser Gln Glu Ala Ala Pro Leu Ser Gly Pro
20 25 30

Cys Gly Arg Arg Val Ile Thr Ser Arg Ile Val Gly Gly Glu Asp Ala
35 40 45

Glu Leu Gly Arg Trp Pro Trp Gln Gly Ser Leu Arg Leu Trp Asp Ser
50 55 60

His Val Cys Gly Val Ser Leu Leu Ser His Arg Trp Ala Leu Thr Ala
65 70 75 80

Ala His Cys Phe Glu Thr Tyr Ser Asp Leu Ser Asp Pro Ser Gly Trp
85 90 95

Met Val Gln Phe Gly Gln Leu Thr Ser Met Pro Ser Phe Trp Ser Leu
100 105 110

Gln Ala Tyr Tyr Thr Arg Tyr Phe Val Ser Asn Ile Tyr Leu Ser Pro
115 120 125

Arg Tyr Leu Gly Asn Ser Pro Tyr Asp Ile Ala Leu Val Lys Leu Ser
130 135 140

Ala Pro Val Thr Tyr Thr Lys His Ile Gln Pro Ile Cys Leu Gln Ala
145 150 155 160

Ser Thr Phe Glu Phe Glu Asn Arg Thr Asp Cys Trp Val Thr Gly Trp
165 170 175

Gly Tyr Ile Lys Glu Asp Glu Ala Leu Pro Ser Pro His Thr Leu Gln
180 185 190

Glu Val Gln Val Ala Ile Ile Asn Asn Ser Met Cys Asn His Leu Phe
195 200 205

Leu Lys Tyr Ser Phe Arg Lys Asp Ile Phe Gly Asp Met Val Cys Ala
210 215 220

Gly Asn Ala Gln Gly Gly Lys Asp Ala Cys Phe Gly Asp Ser Gly Gly
225 230 235 240

Pro Leu Ala Cys Asn Lys Asn Gly Leu Trp Tyr Gln Ile Gly Val Val
245 250 255

0055003-007304

Ser Trp Gly Val Gly Cys Gly Arg Pro Asn Arg Pro Gly Val Tyr Thr
260 265 270

Asn Ile Ser His His Phe Glu Trp Ile Gln Lys Leu Met Ala Gln Ser
275 280 285

Gly Met Ser Gln Pro Asp Pro Ser Trp Pro Leu Leu Phe Phe Pro Leu
290 295 300

Leu Trp Ala Leu Pro Leu Leu Gly Pro Val
305 310

<210> 4976
<211> 240
<212> PRT
<213> Homo sapiens

<400> 4976
Met Gly Asn Cys Gln Ala Gly His Asn Leu His Leu Cys Leu Ala His
1 5 10 15

His Pro Pro Leu Val Cys Ala Thr Leu Ile Leu Leu Leu Gly Leu
20 25 30

Ser Gly Leu Gly Leu Gly Ser Phe Leu Leu Thr His Arg Thr Gly Leu
35 40 45

Arg Ser Pro Asp Ile Pro Gln Asp Trp Val Ser Phe Leu Arg Ser Phe
50 55 60

Gly Gln Leu Thr Leu Cys Pro Arg Asn Gly Thr Val Thr Gly Lys Trp
65 70 75 80

Arg Gly Ser His Val Val Gly Leu Leu Thr Thr Leu Asn Phe Gly Asp
85 90 95

Gly Pro Asp Arg Asn Lys Thr Arg Thr Phe Gln Ala Thr Val Leu Gly
100 105 110

Ser Gln Met Gly Leu Lys Gly Ser Ser Ala Gly Gln Leu Val Leu Ile
115 120 125

Thr Ala Arg Val Thr Thr Glu Arg Thr Ala Gly Thr Cys Leu Tyr Phe
130 135 140

Ser Ala Val Pro Gly Ile Leu Pro Ser Ser Gln Pro Pro Ile Ser Cys
145 150 155 160

Ser Glu Glu Gly Ala Gly Asn Ala Thr Leu Ser Pro Arg Met Gly Glu
165 170 175

Glu Cys Val Ser Val Trp Ser His Glu Gly Leu Val Leu Thr Lys Leu
180 185 190

Leu Thr Ser Glu Glu Leu Ala Leu Cys Gly Ser Arg Leu Leu Val Leu
195 200 205

Gly Ser Phe Leu Leu Leu Phe Cys Gly Leu Leu Cys Cys Val Thr Ala

210

215

220

Met Cys Phe His Pro Arg Arg Glu Ser His Trp Ser Arg Thr Arg Leu
 225 230 235 240

<210> 4977

<211> 31

<212> PRT

<213> Homo sapiens

<400> 4977

Met Cys Ile Cys Val Leu Ile Leu Ile Cys Ile Phe Thr Asp Phe Ile
 1 5 10 15

Ile Ser Tyr Val Leu Asn Phe Tyr Leu Trp Arg Lys His Thr Thr
 20 25 30

<210> 4978

<211> 23

<212> PRT

<213> Homo sapiens

<400> 4978

Met His Leu Ile Ile Phe Phe Ile Ile Leu Cys Thr Asn Ser Ala Cys
 1 5 10 15

Asn Asn Gln Phe Thr Trp Lys
 20

<210> 4979

<211> 51

<212> PRT

<213> Homo sapiens

<400> 4979

Met Thr Leu Leu Leu Trp Lys Phe Asn Leu Phe Ile Val Phe Trp Ala
 1 5 10 15

Leu Trp Val Val Arg Ala Gly Leu Trp Val Leu Gly Asn Ser Ser Gly
 20 25 30

Ser Gln His Ser Lys Ala Lys Leu Thr Ser Ser Ser His Thr Leu Gln
 35 40 45

Glu Lys His
 50

<210> 4980

<211> 51

<212> PRT

<213> Homo sapiens

<400> 4980

Met Thr Leu Leu Leu Trp Lys Phe Asn Leu Phe Ile Val Phe Trp Ala
1 5 10 15
Leu Trp Val Val Arg Ala Gly Leu Trp Val Leu Gly Asn Ser Ser Gly
20 25 30
Ser Gln His Ser Lys Ala Lys Leu Thr Ser Ser Ser His Thr Leu Gln
35 40 45
Glu Lys His
50

<210> 4981

<211> 51

<212> PRT

<213> Homo sapiens

<400> 4981

Met Thr Leu Leu Leu Trp Lys Phe Asn Leu Phe Ile Val Phe Trp Ala
1 5 10 15
Leu Trp Val Val Arg Ala Gly Leu Trp Val Leu Gly Asn Ser Ser Gly
20 25 30
Ser Gln His Ser Lys Ala Lys Leu Thr Ser Ser Ser His Thr Leu Gln
35 40 45
Glu Lys His
50

<210> 4982

<211> 51

<212> PRT

<213> Homo sapiens

<400> 4982

Met Thr Leu Leu Leu Trp Lys Phe Asn Leu Phe Ile Val Phe Trp Ala
1 5 10 15
Leu Trp Val Val Arg Ala Gly Leu Trp Val Leu Gly Asn Ser Ser Gly
20 25 30
Ser Gln His Ser Lys Ala Lys Leu Thr Ser Ser Ser His Thr Leu Gln
35 40 45
Glu Lys His
50

<210> 4983

<211> 28

<212> PRT

<213> Homo sapiens

<400> 4983

His Glu Pro Arg Val Pro Trp Ser Asp Lys Leu Gly Asn Ala Ala Cys
1 5 10 15

Cys Thr Phe Leu Ser Lys Ile His Val Gln Arg Ile
20 25

<210> 4984

<211> 15

<212> PRT

<213> Homo sapiens

<400> 4984

Met Arg Glu Val Leu Leu Phe Phe Leu Phe Tyr Thr Arg Gly His
1 5 10 15

<210> 4985

<211> 51

<212> PRT

<213> Homo sapiens

<400> 4985

Met Pro Ser Glu Ala Phe Val Ile Val Ile Gln Pro Leu Ile Val Ser
1 5 10 15

Thr Ser Thr Asp His Phe Val Thr Thr Ser Cys Gly Ser Tyr Tyr Ser
20 25 30

Gln Thr Val Ser Leu Lys Arg Lys Pro Leu Phe Tyr Lys Ser Thr Leu
35 40 45

Gln Val Phe
50

<210> 4986

<211> 34

<212> PRT

<213> Homo sapiens

<400> 4986

Met Leu Met Ile Cys Leu Leu Ser Gly Arg Ala Phe Ala Tyr Phe Phe
1 5 10 15

Ser Asn Tyr Phe Thr Ser Thr Leu Ile Leu Leu Ser Gln Phe Ser Tyr
20 25 30

Gln His

<210> 4987

<211> 118

<212> PRT

<213> Homo sapiens

<400> 4987

Val Ala Arg Ala Val Cys Leu Val Phe Ala Leu Ile Val Phe Ser Cys
1 5 10 15

Ile Tyr Gly Glu Gly Tyr Ser Asn Ala His Glu Ser Lys Gln Met Tyr
20 25 30

Cys Val Phe Asn Arg Asn Glu Asp Ala Cys Arg Tyr Gly Ser Ala Ile
35 40 45

Gly Val Leu Ala Phe Leu Ala Ser Ala Phe Phe Leu Val Val Asp Ala
50 55 60

Tyr Phe Pro Gln Ile Ser Asn Ala Thr Asp Arg Lys Tyr Leu Val Ile
65 70 75 80

Gly Asp Leu Leu Phe Ser Ala Leu Trp Thr Phe Leu Trp Phe Val Gly
85 90 95

Phe Cys Phe Leu Thr Asn Gln Trp Ala Val Thr Asn Pro Lys Thr Cys
100 105 110

Trp Trp Gly Pro Thr Leu
115

<210> 4988

<211> 4

<212> PRT

<213> Homo sapiens

<400> 4988

Cys Thr Leu Leu
1

<210> 4989

<211> 36

<212> PRT

<213> Homo sapiens

<400> 4989

His Lys Phe Ser Glu Cys Thr Val Tyr Phe Gly Phe Arg Arg Ala Val
1 5 10 15

Tyr Leu Ser Leu Leu Leu Leu Ala Ser Ser Ala Leu Gln Leu Pro Leu
20 25 30

Glu Arg Ala Phe
35

<210> 4990

<211> 62

<212> PRT

<213> Homo sapiens

<400> 4990

Lys Cys Phe His Leu Leu Trp Ser Leu Val Thr Ser Ala Gln Arg Pro
 1 5 10 15
 Ser Asp Gly Tyr Phe Phe Glu Ala Phe Ile Tyr Ile Ile Leu Phe Cys
 20 25 30
 Thr Met Phe Phe Leu Asn Val Gln Ile Leu Tyr Ser Ser Glu Lys Asn
 35 40 45
 Thr Val Phe Val Asp Asn His Ser Tyr Tyr Thr Val Leu Arg
 50 55 60

<210> 4991

<211> 14

<212> PRT

<213> Homo sapiens

<400> 4991

Met Ser Thr Phe Leu Trp Asp Ile Gln Thr Thr Tyr Cys Phe
 1 5 10

<210> 4992

<211> 16

<212> PRT

<213> Homo sapiens

<400> 4992

Leu Thr Leu Pro Tyr Leu Phe Leu Gly Gly Gly Trp Arg Gly Gly Val
 1 5 10 15

<210> 4993

<211> 31

<212> PRT

<213> Homo sapiens

<400> 4993

Met Val Cys Trp Leu Leu Pro Leu Trp Val Thr Val Leu Ser Phe Pro
 1 5 10 15

Val Gly Arg Asp Val Ala Ala Leu Leu Ile Phe Thr Ser Ser Tyr
 20 25 30

<210> 4994

<211> 19

<212> PRT

<213> Homo sapiens

<400> 4994

Leu Ser Leu Leu His Pro Leu Ser Val Pro Pro Gly Ser Leu Glu Gln
 1 5 10 15

Asp Gly Val

<210> 4995
 <211> 6
 <212> PRT
 <213> Homo sapiens

<400> 4995
 Gly Asp Val Trp Leu Leu
 1 5

<210> 4996
 <211> 24
 <212> PRT
 <213> Homo sapiens

<400> 4996
 Met Cys Trp Pro Trp Gly Gly Pro Pro Leu Pro Ser Leu Pro Thr Ser
 1 5 10 15

Leu Arg Trp Met Ser Leu Cys Tyr
 20

<210> 4997
 <211> 24
 <212> PRT
 <213> Homo sapiens

<400> 4997
 Met Cys Trp Pro Trp Gly Gly Pro Pro Leu Pro Ser Leu Pro Thr Ser
 1 5 10 15

Leu Arg Trp Met Ser Leu Cys Tyr
 20

<210> 4998
 <211> 46
 <212> PRT
 <213> Homo sapiens

<400> 4998
 Asn Thr Phe Trp His Gly Ser Ser Cys Leu Ser Ile Cys Gln Phe Ser
 1 5 10 15

Cys Glu Asp Ser Val Tyr Arg Leu Tyr Thr Ala His Val Glu Arg Gly
 20 25 30

Gln Trp Val Leu Tyr Leu Lys Tyr Val Leu Pro Phe Cys Cys
 35 40 45

<210> 4999
 <211> 43
 <212> PRT
 <213> Homo sapiens

<400> 4999
 Met Leu Leu Pro Ile Leu Leu Tyr Ser Phe Leu Tyr Pro Thr Ile Val
 1 5 10 15
 Ser Arg Asn Tyr Phe Lys Leu Ile Arg Ser Cys Met Leu Phe Leu Lys
 20 25 30
 Lys Lys Lys Lys Lys Glu Arg Lys Ile Ser Val
 35 40

<210> 5000
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 5000
 Phe Asn Ser Leu Leu Leu Leu Met Leu Pro Cys Tyr Leu Cys Cys His
 1 5 10 15
 Tyr Pro Leu Phe Phe Pro Ser
 20

<210> 5001
 <211> 40
 <212> PRT
 <213> Homo sapiens

<400> 5001
 Met Ser Arg Gly Cys Leu Ser Leu Leu Leu Ile Ile Ile His Phe Leu
 1 5 10 15
 Gly Ser His Cys Pro His Leu Phe Ser Leu Glu Leu Arg Phe Ile Phe
 20 25 30
 Ile Leu Gln Thr Gly Lys Thr Glu
 35 40

<210> 5002
 <211> 14
 <212> PRT
 <213> Homo sapiens

<400> 5002
 Phe Cys Thr Thr Phe Asn Phe Leu Phe Val Phe Cys Leu Arg
 1 5 10

Phe Leu Leu Glu Asp Phe Gln
65 70

<210> 5007
<211> 34
<212> PRT
<213> Homo sapiens

<400> 5007
Met Ser Pro Val Leu Trp Trp Ser Trp Asn Leu Ile Leu Phe Met Asn
1 5 10 15
Phe Gln Ser Leu Glu Lys Ser Met Val Trp Ile Trp Glu Val Gly Leu
20 25 30

Ala Asp

<210> 5008
<211> 37
<212> PRT
<213> Homo sapiens

<400> 5008
Met Gly Leu Leu Leu Phe Gly Gly Ile Phe Leu Leu Thr Val Ile Met
1 5 10 15
Lys Val Ile Thr Met Arg Asp Ser Asp Leu Phe Leu Lys Phe Gly Gly
20 25 30

Gly Ile Ser Pro His
35

<210> 5009
<211> 14
<212> PRT
<213> Homo sapiens

<400> 5009
Met Phe Leu Tyr Arg Asn Lys Phe Ile Pro Val Thr Leu Trp
1 5 10

<210> 5010
<211> 36
<212> PRT
<213> Homo sapiens

<400> 5010
Met Tyr Trp Val Ile Ala Gly Thr Thr Phe Thr Ser Leu Leu Cys Leu
1 5 10 15
Ile Gln Phe Ile Ser Leu Val Cys Ala Leu Leu Lys Tyr Leu Cys Leu
20 25 30

Asn Phe Cys Ile
35

<210> 5011
<211> 35
<212> PRT
<213> Homo sapiens

<400> 5011
Met Ile Leu Ser Leu Val Leu Ser Tyr Asn Leu Phe Leu Val Gln Leu
1 5 10 15
Ile Leu Cys Thr Ile Thr Ala Glu Met Ser Asn Trp Asp Arg Leu Ala
20 25 30
Ser Lys Ala
35

<210> 5012
<211> 23
<212> PRT
<213> Homo sapiens

<400> 5012
His Leu Pro Ile Cys Phe Leu Phe Ser Ala Ser Pro Gly Ala Ser Gly
1 5 10 15
His Phe Leu Leu Pro Phe Leu
20

<210> 5013
<211> 30
<212> PRT
<213> Homo sapiens

<400> 5013
Met Ser Ile Phe Val Gln Val Phe Val Trp Lys Tyr Val Phe Val Ser
1 5 10 15
Leu Arg Tyr Ile Gly Lys Glu Leu Gln Asn Gln Leu Cys Ala
20 25 30

<210> 5014
<211> 47
<212> PRT
<213> Homo sapiens

<400> 5014
Met Lys Cys Asn Ser Cys Ser Leu Gly Pro Phe His Ser Leu Phe Leu
1 5 10 15
Gly Pro Ala Cys Gly Leu Val Gly Thr Leu Glu Ser Arg His Ser Arg

20

25

30

Gly Arg Gly Arg Ala Ala Phe Leu Ala Gly His Ser Arg Ala Leu
35 40 45

<210> 5015
<211> 134
<212> PRT
<213> Homo sapiens

<400> 5015
Met Gly Pro Glu Asp Leu Gly Glu Arg Asp Asn Ser Phe His Cys Ile
1 5 10 15
Phe Val Thr Ala Thr Phe Leu Glu Thr Phe Phe Trp Lys Arg Leu Pro
20 25 30
Trp Leu Leu Val Gln Met Gly Val Ser Gln Gly Ala Gly Leu Cys Pro
35 40 45
Trp Asn Leu Ser Leu Ala Thr Cys Phe Arg Asp Trp Ser Gly Gly Thr
50 55 60
Glu Gly Leu Gly Phe Ser Leu Trp Gly Leu Cys Cys Leu Trp Gly Tyr
65 70 75 80
Thr Glu Gly Lys Ala Gly Gln Trp Gly Leu Cys Cys Gly Glu Trp Gln
85 90 95
Leu Ala Gln Ser Arg Asp Lys Ile Leu Glu Leu Gly Arg Ser Pro Ala
100 105 110
Phe Gly Val Ala Phe Gly Ala Pro Gly Thr Ala Gly Arg Gly Ala Gln
115 120 125
Tyr Leu Leu Ser Ser Ala
130

<210> 5016
<211> 48
<212> PRT
<213> Homo sapiens

<400> 5016
Met Ser Phe Tyr Ile Leu Leu Leu Ala Leu Ile Leu Phe Ile Ala Gly
1 5 10 15
Phe Ile Leu Arg Ser Ile Ile Ile Lys Arg Ser Leu Phe Ser Val Asn
20 25 30
Phe Met Gln Thr Arg Trp Gln Arg Leu Asn Phe Ser Leu Arg Asp Gln
35 40 45

<210> 5017
 <211> 33
 <212> PRT
 <213> Homo sapiens

<400> 5017
 Met Cys Leu Ile Phe Ser Ile Cys Phe Leu Cys Ile His Ile Gly Phe
 1 5 10 15
 Cys Phe Val Phe Asn Leu Leu Ile Met Gly Leu Asn Phe Gln Ile Tyr
 20 25 30
 Phe

<210> 5018
 <211> 53
 <212> PRT
 <213> Homo sapiens

<400> 5018
 Lys Glu Ala Gly Thr Trp Leu Val Phe Trp Ile Arg Leu Asp Phe Ser
 1 5 10 15
 Thr Gly Gln Asp Ser Leu Phe Leu Gly Arg Ala Glu Cys His Val Asp
 20 25 30
 Ser Ser Asp Arg Ile Thr Ala Val Pro Leu Ser Leu Gly Phe Glu Ser
 35 40 45
 Leu Gly Leu Gly His
 50

<210> 5019
 <211> 33
 <212> PRT
 <213> Homo sapiens

<400> 5019
 Met Cys Pro Tyr Cys Pro Thr Ser Cys Ala Leu Leu Val Met Cys Phe
 1 5 10 15
 Leu Leu Ile Ser Leu Ser Cys Leu Val Ala Ser Ser Leu Leu Lys
 20 25 30
 Val

<210> 5020
 <211> 33
 <212> PRT
 <213> Homo sapiens

<400> 5020

Met Cys Leu Asn Leu Thr Val Ile Ser Ala Leu Leu Trp Trp Ser Gly
 1 5 10 15

Thr Lys Val Ala Val Ala Pro Arg Tyr Ala Tyr Thr Val Lys Asn Asn
 20 25 30

Leu

<210> 5021
 <211> 53
 <212> PRT
 <213> Homo sapiens

<400> 5021
 Met Lys Gly His Phe Gly Lys Gly Leu Asp Glu Leu Val Ala Phe Asn
 1 5 10 15

Leu Cys Leu His Leu Pro Leu Ser Ala Thr Leu Gly Arg Pro Gly Gly
 20 25 30

Ala Ser Glu Asp His Arg Pro Thr Gly Leu Ala Ile Met Thr Pro Leu
 35 40 45

Glu Val Ser Ser Ser
 50

<210> 5022
 <211> 40
 <212> PRT
 <213> Homo sapiens

<400> 5022
 Glu Val Lys Cys Ile Tyr Ile Phe Leu Trp Leu Leu Met Leu Leu Val
 1 5 10 15

Leu His Leu Arg Ile His Cys Gln Ile Gln Gly His Glu Asp Leu Leu
 20 25 30

Leu Cys Phe Leu Leu Arg Ile Leu
 35 40

<210> 5023
 <211> 60
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (10)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (42)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5023

Met Phe Phe Pro Cys Leu Pro Thr Leu Xaa Leu Arg Ile Leu His Ser
1 5 10 15
Gly Trp Val Gly Leu Phe Leu Leu Ile Ser Ser Arg Ala Pro Ser Ser
20 25 30
Ser Leu Ala Trp Lys His Gly Pro Gly Xaa Leu Trp Trp Pro Arg Arg
35 40 45
Pro Leu Arg Ser Cys Thr Gly Leu Ala Ser Cys Gly
50 55 60

<210> 5024

<211> 31

<212> PRT

<213> Homo sapiens

<400> 5024

Met Met Lys Met Lys Met Lys Met Gln Trp Met Leu Met Val Val Met
1 5 10 15
Met Met Ile Lys Gly Val Met Met Asn Thr Val Met Met Met Thr
20 25 30

<210> 5025

<211> 47

<212> PRT

<213> Homo sapiens

<400> 5025

Met Arg Ile Tyr Leu Met Leu Val Leu Val Tyr Cys Glu Leu Asn Ile
1 5 10 15
Thr Ala Leu Glu Pro Lys Arg Arg Cys Leu Arg His Gly Leu Leu Leu
20 25 30
Leu Cys Ser Phe Gln Gly Ala Pro Val Ile Pro Ala Val Ser Thr
35 40 45

<210> 5026

<211> 13

<212> PRT

<213> Homo sapiens

<400> 5026

Met Ala Ser Gly Leu Asn Ser Gly Ala Phe Gly Val Val
1 5 10

<210> 5027

<211> 17

Ile Leu Phe Ser Lys
20

<210> 5031
<211> 35
<212> PRT
<213> Homo sapiens

<400> 5031
Met Phe Phe Glu Ile His Pro Leu Leu Thr Phe Cys Thr Ile Cys Phe
1 5 10 15

Ile Ile Cys Thr Leu Cys Val Gly Gly Leu Cys Val Gln Tyr Ala Ile
20 25 30

Gly Phe Ser
35

<210> 5032
<211> 45
<212> PRT
<213> Homo sapiens

<400> 5032
Met Leu Leu Leu Ser Phe His Ser Leu Leu Tyr Phe Gly Asp Leu Phe
1 5 10 15

Ile Leu Leu Cys Val His Leu Ile Leu Gln Cys Val Ser Thr Thr Phe
20 25 30

Asn Leu Phe Thr Tyr Arg Thr Met Gln Glu Phe Leu Trp
35 40 45

<210> 5033
<211> 15
<212> PRT
<213> Homo sapiens

<400> 5033
Met Cys Leu Cys Asn Asp Cys Leu Phe Trp Phe Thr Met Phe Leu
1 5 10 15

<210> 5034
<211> 37
<212> PRT
<213> Homo sapiens

<400> 5034
Met Ile Thr Asp Val Gln Leu Ala Ile Phe Ala Asn Met Leu Gly Val
1 5 10 15

Ser Leu Phe Leu Leu Val Val Leu Tyr His Tyr Val Ala Val Asn Asn
20 25 30

Pro Lys Lys Gln Glu
35

<210> 5035
<211> 99
<212> PRT
<213> Homo sapiens

<400> 5035
Phe His Pro Phe Thr Phe Tyr Val Phe Val Cys Leu Cys Leu Lys Cys
1 5 10 15
Ile Tyr His Arg Gln His Ile Val Gly Ser Cys Phe Phe Ile Gln Phe
20 25 30
Asp Ser Leu Cys Leu Leu Ile Asp Val Trp Val His Leu His Leu Met
35 40 45
Leu Leu Ser Val Trp Leu Gly Leu Ser Leu Ser Ser Cys Tyr Leu Phe
50 55 60
Cys Ile Cys Ser Met Tyr Ala Leu Phe Pro Phe Leu Pro Phe Ser Ala
65 70 75 80
Phe Phe Trp Ile Thr Val Phe Phe Asn Asp Ser Ile Val Phe Ser Ser
85 90 95
Leu Ile Tyr

<210> 5036
<211> 234
<212> PRT
<213> Homo sapiens

<400> 5036
Lys Leu Leu Tyr Thr Thr Leu Arg His Pro Lys Cys Phe Leu Gln Arg
1 5 10 15
Leu Ser Leu Glu Asn Cys His Leu Thr Glu Ala Asn Cys Lys Asp Leu
20 25 30
Ala Ala Val Leu Val Val Ser Arg Glu Leu Thr His Leu Cys Leu Ala
35 40 45
Lys Asn Pro Ile Gly Asn Thr Gly Val Lys Phe Leu Cys Glu Gly Leu
50 55 60
Arg Tyr Pro Glu Cys Lys Leu Gln Thr Leu Val Leu Trp Asn Cys Asp
65 70 75 80
Ile Thr Ser Asp Gly Cys Cys Asp Leu Thr Lys Leu Leu Gln Glu Lys
85 90 95
Ser Ser Leu Leu Cys Leu Asp Leu Gly Leu Asn His Ile Gly Val Lys
100 105 110

50

55

<210> 5040
 <211> 7
 <212> PRT
 <213> Homo sapiens

<400> 5040
 Ile Ile Gly Thr Phe Tyr Gln
 1 5

<210> 5041
 <211> 40
 <212> PRT
 <213> Homo sapiens

<400> 5041
 Met Thr Gly His Ser Pro Ser Pro Ile Tyr Leu Val Leu Ala Trp Gly
 1 5 10 15
 Val Thr Ala Ala Ala Thr Thr Leu Thr Gly Pro Val Leu Ser Arg Tyr
 20 25 30
 Asn Leu Ala Thr Pro Trp Asn Ser
 35 40

<210> 5042
 <211> 28
 <212> PRT
 <213> Homo sapiens

<400> 5042
 Met Pro Asn Cys Leu His Ile Ile Leu Gly Ser Phe Leu Leu Ile Ile
 1 5 10 15
 Phe Thr Val Cys Met Phe Ile Gly Lys Gly Leu Leu
 20 25

<210> 5043
 <211> 27
 <212> PRT
 <213> Homo sapiens

<400> 5043
 Met Leu Leu Leu Phe Trp Thr Phe Ala Leu Asp Val Val Pro Thr Glu
 1 5 10 15
 Trp Leu Ala Gly Arg Arg Glu Ile Leu Phe Arg
 20 25

<210> 5044

<211> 47
 <212> PRT
 <213> Homo sapiens

<400> 5044
 Met Tyr Ser Lys Ser Ser Ala Asn Ile Ser Gln Gly Met Leu Asp Ile
 1 5 10 15
 Leu Leu Trp Ile Asp Leu Ala His Asp Asp Leu Leu Gly Ser Pro Ser
 20 25 30
 Pro Val Ile Leu Arg Ser His Ala His Ser Gly Ile Leu Thr Val
 35 40 45

<210> 5045
 <211> 32
 <212> PRT
 <213> Homo sapiens
 <400> 5045
 Met Phe Ser Arg Phe Ile His Leu Phe Gly Val Leu Asn Leu Met Trp
 1 5 10 15
 Leu Ser Leu Val Ser Cys Gln Cys Leu Phe Ala Phe Cys Phe Gln Arg
 20 25 30

<210> 5046
 <211> 76
 <212> PRT
 <213> Homo sapiens
 <400> 5046
 Met Gly Lys Pro Pro Thr His Glu Ala Ile His Ser Val Val Lys Trp
 1 5 10 15
 Leu Leu Ile Val Thr Lys Leu Leu Arg Leu Ser Gln Ile Cys Phe Leu
 20 25 30
 Leu Phe Pro Leu Phe Leu Phe Leu Thr Ser Gly Thr Arg Leu Gly Ile
 35 40 45
 Arg Leu Ile Phe Phe Cys Lys Thr Ala Glu Phe Phe Ile Phe Asn Ile
 50 55 60
 His Phe Ile Ile Arg Lys Ile Ile Tyr Thr Ile Ser
 65 70 75

<210> 5047
 <211> 28
 <212> PRT
 <213> Homo sapiens

Japan		U.S.	
Year	Ratio	Year	Ratio
1970	0.75	1970	0.75
1971	0.75	1971	0.75
1972	0.75	1972	0.75
1973	0.75	1973	0.75
1974	0.75	1974	0.75
1975	0.75	1975	0.75
1976	0.75	1976	0.75
1977	0.75	1977	0.75
1978	0.75	1978	0.75
1979	0.75	1979	0.75
1980	0.75	1980	0.75
1981	0.75	1981	0.75
1982	0.75	1982	0.75
1983	0.75	1983	0.75
1984	0.75	1984	0.75
1985	0.75	1985	0.75
1986	0.75	1986	0.75
1987	0.75	1987	0.75
1988	0.75	1988	0.75
1989	0.75	1989	0.75
1990	0.75	1990	0.75
1991	0.75	1991	0.75
1992	0.75	1992	0.75
1993	0.75	1993	0.75
1994	0.75	1994	0.75
1995	0.75	1995	0.75
1996	0.75	1996	0.75
1997	0.75	1997	0.75
1998	0.75	1998	0.75
1999	0.75	1999	0.75
2000	0.75	2000	0.75
2001	0.75	2001	0.75
2002	0.75	2002	0.75
2003	0.75	2003	0.75
2004	0.75	2004	0.75
2005	0.75	2005	0.75
2006	0.75	2006	0.75
2007	0.75	2007	0.75
2008	0.75	2008	0.75
2009	0.75	2009	0.75
2010	0.75	2010	0.75
2011	0.75	2011	0.75
2012	0.75	2012	0.75
2013	0.75	2013	0.75
2014	0.75	2014	0.75
2015	0.75	2015	0.75
2016	0.75	2016	0.75
2017	0.75	2017	0.75
2018	0.75	2018	0.75
2019	0.75	2019	0.75
2020	0.75	2020	0.75
2021	0.75	2021	0.75
2022	0.75	2022	0.75
2023	0.75	2023	0.75
2024	0.75	2024	0.75
2025	0.75	2025	0.75
2026	0.75	2026	0.75
2027	0.75	2027	0.75
2028	0.75	2028	0.75
2029	0.75	2029	0.75
2030	0.75	2030	0.75
2031	0.75	2031	0.75
2032	0.75	2032	0.75
2033	0.75	2033	0.75
2034	0.75	2034	0.75
2035	0.75	2035	0.75
2036	0.75	2036	0.75
2037	0.75	2037	0.75
2038	0.75	2038	0.75
2039	0.75	2039	0.75
2040	0.75	2040	0.75
2041	0.75	2041	0.75
2042	0.75	2042	0.75
2043	0.75	2043	0.75
2044	0.75	2044	0.75
2045	0.75	2045	0.75
2046	0.75	2046	0.75
2047	0.75	2047	0.75
2048	0.75	2048	0.75
2049	0.75	2049	0.75
2050	0.75	2050	0.75
2051	0.75	2051	0.75
2052	0.75	2052	0.75
2053	0.75	2053	0.75
2054	0.75	2054	0.75
2055	0.75		

Leu Met Lys Ser Ala Leu Val Trp Met Ile Trp Leu
20 25

<213> Homo sapiens

Phe Glu Arg Ile
20

<213> Homo sapiens

Lys Lys Lys Lys Lys Lys
50

<213> Homo sapiens

Met Ser Ser Trp Leu Leu Val Tyr Ile Gly Trp Leu Leu Ser Ser Leu
1 5 10 15

<213> Homo sapiens

1990-1991		1991-1992		1992-1993		1993-1994		1994-1995		1995-1996		1996-1997		1997-1998		1998-1999		1999-2000		2000-2001		2001-2002		2002-2003		2003-2004		2004-2005		2005-2006		2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014		2014-2015		2015-2016		2016-2017		2017-2018		2018-2019		2019-2020		2020-2021		2021-2022		2022-2023		2023-2024		2024-2025		2025-2026		2026-2027		2027-2028		2028-2029		2029-2030		2030-2031		2031-2032		2032-2033		2033-2034		2034-2035		2035-2036		2036-2037		2037-2038		2038-2039		2039-2040		2040-2041		2041-2042		2042-2043		2043-2044		2044-2045		2045-2046		2046-2047		2047-2048		2048-2049		2049-2050		2050-2051		2051-2052		2052-2053		2053-2054		2054-2055		2055-2056		2056-2057		2057-2058		2058-2059		2059-2060		2060-2061		2061-2062		2062-2063		2063-2064		2064-2065		2065-2066		2066-2067		2067-2068		2068-2069		2069-2070		2070-2071		2071-2072		2072-2073		2073-2074		2074-2075		2075-2076		2076-2077		2077-2078		2078-2079		2079-2080		2080-2081		2081-2082		2082-2083		2083-2084		2084-2085		2085-2086		2086-2087		2087-2088		2088-2089		2089-2090		2090-2091		2091-2092		2092-2093		2093-2094		2094-2095		2095-2096		2096-2097		2097-2098		2098-2099		2099-2100		2100-2101		2101-2102		2102-2103		2103-2104		2104-2105		2105-2106		2106-2107		2107-2108		2108-2109		2109-2110		2110-2111		2111-2112		2112-2113		2113-2114		2114-2115		2115-2116		2116-2117		2117-2118		2118-2119		2119-2120		2120-2121		2121-2122		2122-2123		2123-2124		2124-2125		2125-2126		2126-2127		2127-2128		2128-2129		2129-2130		2130-2131		2131-2132		2132-2133		2133-2134		2134-2135		2135-2136		2136-2137		2137-2138		2138-2139		2139-2140		2140-2141		2141-2142		2142-2143		2143-2144		2144-2145		2145-2146		2146-2147		2147-2148		2148-2149		2149-2150		2150-2151		2151-2152		2152-2153		2153-2154		2154-2155		2155-2156		2156-2157		2157-2158		2158-2159		2159-2160		2160-2161		2161-2162		2162-2163		2163-2164		2164-2165		2165-2166		2166-2167		2167-2168		2168-2169		2169-2170		2170-2171		2171-2172		2172-2173		2173-2174		2174-2175		2175-2176		2176-2177		2177-2178		2178-2179		2179-2180		2180-2181		2181-2182		2182-2183		2183-2184		2184-2185		2185-2186		2186-2187		2187-2188		2188-2189		2189-2190		2190-2191		2191-2192		2192-2193		2193-2194		2194-2195		2195-2196		2196-2197		2197-2198		2198-2199		2199-2200		2200-2201		2201-2202		2202-2203		2203-2204		2204-2205		2205-2206		2206-2207		2207-2208		2208-2209		2209-2210		2210-2211		2211-2212		2212-2213		2213-2214		2214-2215		2215-2216		2216-2217	
-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--	-----------	--

<221> SITE

$\langle 222 \rangle$ (192)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5051

Met Lys Ala Pro Leu Ala Thr Leu Ala Leu Leu Trp Tyr His Thr Val
1 5 10 15

Val Arg Pro Phe Phe Ala Leu Asp Gly Ser Asp Asn Lys Ala Gly Leu
20 25 30

Asp Glu Ala Lys Glu Ile Leu Leu Lys Lys Glu Ala Ala Tyr Pro Asn
35 40 45

Ser Ser Leu Phe Met Phe Phe Lys Gly Arg Ile Gln Arg Leu Glu Cys
50 55 60

Gln Ile Asn Ser Ala Leu Thr Ser Phe His Thr Ala Leu Glu Leu Ala
65 70 75 80

Val Asp Gln Arg Glu Ile Gln His Val Cys Leu Tyr Glu Ile Gly Trp
85 90 95

Cys Ser Met Ile Glu Leu Asn Phe Lys Asp Ala Phe Asp Ser Phe Glu
100 105 110

Arg Leu Lys Asn Glu Ser Arg Trp Ser Gln Cys Tyr Tyr Ala Tyr Leu
115 120 125

Thr Ala Val Cys Gln Gly Ala Thr Gly Asp Val Asp Gly Ala Gln Ile
130 135 140

Val	Phe	Lys	Glu	Val	Gln	Lys	Leu	Phe	Lys	Arg	Lys	Asn	Asn	Gln	Ile
145					150					155					160

Glu Gln Phe Ser Val Lys Lys Ala Glu Arg Phe Arg Lys Gln Thr Pro
165 170 175

Thr Lys Ala Leu Cys Val Leu Ala Ser Ile Glu Val Leu Tyr Leu Xaa
180 185 190

Lys Ala Leu Pro Asn Cys Ser Phe Pro Asn Leu Gln Arg Met Ser Gln
195 200 205

Ala Cys His Glu Val Asp Asp Ser Ser Val Val Gly Leu Lys Tyr Leu
210 215 220

Leu Leu Gly Ala Ile His Lys Cys Leu Gly Asn Ser Glu Asp Ala Val
225 230 235 240

Gln Tyr Phe Gln Arg Ala Val Lys Asp Glu Leu Cys Arg Gln Asn Asn
245 250 255

Leu Tyr Val Gln Pro Tyr Ala Cys Tyr Glu Leu Gly Cys Leu Leu Leu
260 265 270

Asp Lys Pro Glu Thr Val Gly Arg Gly Arg Ala Leu Leu Leu Gln Ala
275 280 285

Lys Glu Asp Phe Ser Gly Tyr Asp Phe Glu Asn Arg Leu His Val Arg
 290 295 300

Ile His Ala Ala Leu Ala Ser Leu Arg Glu Leu Val Pro Gln
 305 310 315

<210> 5052
 <211> 24
 <212> PRT
 <213> Homo sapiens

<400> 5052
 Met Phe Leu Val Leu Val Ile Cys Tyr Tyr Leu Leu Leu Ser Ser Arg
 1 5 10 15

Gly Pro Asp Trp Pro Trp His Asn
 20

<210> 5053
 <211> 33
 <212> PRT
 <213> Homo sapiens

<400> 5053
 Met Leu Arg Asn Thr Ala Leu Trp Tyr His Leu Leu Thr Asp Leu Leu
 1 5 10 15

Leu Ile Tyr Leu Ile Gly Arg Val Val Ser Ile Ser Phe Tyr Phe Tyr
 20 25 30

His

<210> 5054
 <211> 57
 <212> PRT
 <213> Homo sapiens

<400> 5054
 Glu Pro Leu Ala Asp Phe Cys Phe Leu Tyr Arg Leu Leu Cys Arg Leu
 1 5 10 15

Thr Ser Arg Leu Tyr Pro Cys Leu Cys Glu Arg Gly Cys Val Val Gly
 20 25 30

Thr Gly Thr Ile Leu Thr Gln Lys Leu Ala Thr Ser His Cys Leu Ala
 35 40 45

Gln Met Trp Ile Ile Val Ile Thr Asn
 50 55

<210> 5055
 <211> 32

<210> 5065
 <211> 34
 <212> PRT
 <213> Homo sapiens

<400> 5065
 Met Phe Met Phe Leu Leu Leu Val Gly Leu Cys Leu Phe Pro Leu Asn
 1 5 10 15

Ile Thr Lys Lys Asn Lys Lys Lys Ser Cys Ile Asn Ile Cys Cys Ile
 20 25 30

Ser Lys

<210> 5066
 <211> 15
 <212> PRT
 <213> Homo sapiens

<400> 5066
 Asn Val Cys Phe Ser Cys Leu Leu Lys Leu Phe Trp Gly Ser Gln
 1 5 10 15

<210> 5067
 <211> 14
 <212> PRT
 <213> Homo sapiens

<400> 5067
 Ala Ala Leu Trp Gln Ser Leu Leu Phe Cys Phe Val Cys Phe
 1 5 10

<210> 5068
 <211> 64
 <212> PRT
 <213> Homo sapiens

<400> 5068
 Met Val Leu Leu Gln Thr Val Val Trp Leu Ser Ser His Val Leu Trp
 1 5 10 15

Leu Pro Gln Asn Arg Ala Gln Ala Ala Arg Gly His Leu His Val Pro
 20 25 30

Leu Leu Ala Val Pro Ala Thr Ser Lys Leu Cys His Arg Leu Asn Ser
 35 40 45

Ser Phe Arg Gly Pro Gly Trp His Pro Gly Asp Leu Pro Leu Leu Phe
 50 55 60

<210> 5069
 <211> 42
 <212> PRT
 <213> Homo sapiens

<400> 5069
 Leu Trp Arg Leu Ala Val Leu Lys Leu Ile Cys Gly Phe Ile Asn Thr
 1 5 10 15
 Leu Leu Ile Ile Phe Pro Gly Glu Ile Phe Ile Lys Cys Arg Pro Ala
 20 25 30
 Lys Ala Ile Leu Lys Arg Arg Arg Arg His
 35 40

<210> 5070
 <211> 45
 <212> PRT
 <213> Homo sapiens

<400> 5070
 Met Leu Phe Val Leu Tyr Met Ser Leu Leu Ser Lys Ala Val Ser Ser
 1 5 10 15
 Met Arg Thr Gly Thr Ile Leu Ile Asn Cys Val Phe Leu Ala Pro His
 20 25 30
 Thr Ser Ala Trp Asn Ile Ala Thr Ile Asn Lys Cys Leu
 35 40 45

<210> 5071
 <211> 27
 <212> PRT
 <213> Homo sapiens

<400> 5071
 Ser Tyr Ile Ser Asp Thr Arg Ser His Phe Leu Phe Leu Tyr Phe Ile
 1 5 10 15
 His Pro Phe Ile Gln Gln Ile Phe Ala Glu His
 20 25

<210> 5072
 <211> 31
 <212> PRT
 <213> Homo sapiens

<400> 5072
 Met Leu Leu His Leu Cys Leu Ser Leu Pro Ser Ser Val Trp Phe Leu
 1 5 10 15

Gly Val Leu Leu Leu Ser Cys Val Asn Thr Ala Leu Gln Tyr His
 20 25 30

<210> 5073
 <211> 56
 <212> PRT
 <213> Homo sapiens

<400> 5073
 Met Ala Arg Ala Cys Val Phe Gln Leu Ser Leu Trp Arg Lys Leu Pro
 1 5 10 15

Val Gly Ile Asn Leu Ser Pro Ala Ile Leu Ser Leu Ser Leu Gly Cys
 20 25 30

Leu Gly Leu Gly Phe Leu Leu Leu Leu Glu Arg Met Thr Thr Asp Ser
 35 40 45

Gly Ile Arg Gln Arg Arg Gln Thr
 50 55

<210> 5074
 <211> 70
 <212> PRT
 <213> Homo sapiens

<400> 5074
 Met Gln Ser Leu Pro Ser Ala Ser Thr Phe Ser Ala Ser Ser Ala Cys
 1 5 10 15

Gly Ala Ala Met Arg Pro Ala Arg Gly Ser Ala Pro Ser Ala Thr Arg
 20 25 30

Pro Leu Val Pro Thr Thr Ser Ile Val Ser Thr Ser Ala Glu Pro Glu
 35 40 45

Thr Gln Gly Thr Leu Glu His His Gly Pro Trp Gly Leu Cys Pro Ile
 50 55 60

Ser Ser Pro Pro Gln Val
 65 70

<210> 5075
 <211> 34
 <212> PRT
 <213> Homo sapiens

<400> 5075
 Met Ala Ser Arg Val Leu Ala Ala Leu Ile Val Ala Ser Val Val Gly
 1 5 10 15

Leu Ala Glu Leu Tyr Val Met Val Arg Ala Met Glu Gly Glu Leu Gly
 20 25 30

Glu Leu

<210> 5076
<211> 27
<212> PRT
<213> Homo sapiens

<400> 5076
Met Ala Phe Leu Gly Leu Thr Leu Cys Thr Leu His Leu Gly Ile Gln
1 5 10 15
Ala Ser Thr Val Pro Leu Gly Leu Pro Ser Pro
20 25

<210> 5077
<211> 43
<212> PRT
<213> Homo sapiens

<400> 5077
Met Val Val Glu Glu Leu Ala Asn Ile Lys Leu Ala Pro Glu Ile Gln
1 5 10 15
Thr Cys Val Tyr Cys Ser Gly Ser Met Glu Leu Val Thr Met Gly Lys
20 25 30
Arg Gln Arg Leu Glu Leu Cys Lys Val Met Glu
35 40

<210> 5078
<211> 81
<212> PRT
<213> Homo sapiens

<400> 5078
Met Val Ala Arg Val Trp Ser Leu Met Arg Phe Leu Ile Lys Gly Ser
1 5 10 15
Val Pro Gly Gly Ala Val Tyr Leu Val Tyr Asp Gln Glu Leu Leu Gly
20 25 30
Pro Ser Asp Lys Ser Gln Ala Ala Leu Gln Lys Ala Gly Glu Val Val
35 40 45
Pro Pro Ala Met Leu Pro Val Gln Pro Val Arg Val Ser Ala Asp Arg
50 55 60
Pro Ala Asp Thr Pro Ala Pro Ser Pro Ser Lys Asp Leu Leu Ser His
65 70 75 80
Pro

005000-00404

<400> 5083

Met Pro Leu Val Pro Leu Leu Leu Ser Cys Pro Pro Thr Trp Leu Ala
1 5 10 15

Arg Phe Gly Val Ser Leu Pro Cys Ser Gly Ile Pro Val Leu Ala
20 25 30

<210> 5084

<211> 83

<212> PRT

<213> Homo sapiens

<400> 5084

Met Tyr Glu Gln Ala Ala Ala Gly His Gly Pro Ile Ser Pro Phe Ser
1 5 10 15

Leu Cys Val Ser Leu Gly Ile His Pro Ala Asn Gln Gly Arg Pro Gly
20 25 30

Val Trp Ala Leu Gly Thr Asn Gly Ala His Ile Leu Glu Trp Gln Ile
35 40 45

Leu Gly Asp Ala Leu Pro Val Pro Ala Gly Pro Val Pro Pro Thr Gln
50 55 60

Ser Ser Pro Gln Thr Trp Cys Asn Phe Thr Arg Ala Ile Pro Phe Pro
65 70 75 80

Arg Leu Pro

<210> 5085

<211> 12

<212> PRT

<213> Homo sapiens

<400> 5085

Trp Trp Gly Arg Val Trp Pro Val Asn Pro Asp His
1 5 10

<210> 5086

<211> 9

<212> PRT

<213> Homo sapiens

<400> 5086

Met Leu Leu Leu Val Phe Leu Asp Cys
1 5

<210> 5087

<211> 73

<212> PRT

<213> Homo sapiens

<400> 5087

Met Asn Ile Thr Arg Lys Leu Trp Ser Arg Thr Phe Asn Cys Ser Val
1 5 10 15
Pro Cys Ser Asp Thr Val Pro Val Ile Ala Val Ser Val Phe Ile Leu
20 25 30
Phe Leu Pro Val Val Phe Tyr Leu Ser Ser Phe Leu His Ser Glu Gln
35 40 45
Lys Lys Arg Lys Leu Ile Leu Pro Lys Arg Leu Lys Ser Ser Thr Ser
50 55 60
Phe Ala Asn Ile Gln Glu Asn Ser Asn
65 70

<210> 5088

<211> 9

<212> PRT

<213> Homo sapiens

<400> 5088

Met Lys Ser Pro Glu Tyr His Tyr Gly
1 5

<210> 5089

<211> 129

<212> PRT

<213> Homo sapiens

<400> 5089

Met Val Asp Leu Ile Gly Glu Val Leu Leu Pro Leu Leu Gly Gln Glu
1 5 10 15
Ala Glu Ala Cys Thr Ala Asp Asp Pro Ala Asp His Val Lys Val Pro
20 25 30
Ala His Ala Ala Val His Val Val Gln Asn His Ala Leu Leu Gly His
35 40 45
Val Val Phe Asp Asp Asp Ala Val Gly Ala Glu Ala Ala Leu Ala
50 55 60
Ala Pro Gln Glu Leu Gly Gln Val Leu Ile Gly Glu Val Ala Trp Gly
65 70 75 80
Gly Gln Arg Gln Gly Tyr Gln Gly Thr Met Gln Ala Asp Val Gly Thr
85 90 95
Gly Trp Asp Val Leu Leu Ser Pro Ala Glu Pro Leu Ile Cys Ala Gln
100 105 110
His Phe Val Cys Thr His Gly Leu Ile Gly Ser Gln Ser Arg Glu Ile
115 120 125

Tyr

<210> 5090
<211> 61
<212> PRT
<213> Homo sapiens

<400> 5090
Met Cys Leu Leu Leu Leu Trp Leu Thr Thr Phe Gln Arg Thr Ser Gly
1 5 10 15
Ala Leu Arg Arg Gly Gly Leu Ser Ser Pro Ala Trp Ala Met Arg Ser
20 25 30
Pro Ser Val Tyr Ser Thr Gln Thr Pro Ser Pro Met Met Ser Thr Gly
35 40 45
Thr Leu Arg Gly Leu Ser Gly Ala Met Cys Asn Leu Ser
50 55 60

<210> 5091
<211> 12
<212> PRT
<213> Homo sapiens

<400> 5091
Leu Ala Ser Thr Ala Asn Phe Trp Val Val Ile Thr
1 5 10

<210> 5092
<211> 46
<212> PRT
<213> Homo sapiens

<400> 5092
Met Ala Ala Gly Thr Phe Leu Tyr Ile Thr Phe Leu Glu Ile Leu Pro
1 5 10 15
Gln Glu Leu Ala Ser Ser Glu Gln Arg Ile Leu Lys Val Ile Leu Leu
20 25 30
Leu Ala Gly Phe Ala Leu Ser Trp Pro Val Phe Ile Gln Ile
35 40 45

<210> 5093
<211> 52
<212> PRT
<213> Homo sapiens

<400> 5093
Met Val Thr Leu Ser Ser Leu Ile Leu Glu Met Trp Tyr Cys Phe Trp
1 5 10 15

Leu Asn Ile Leu Val Gly Arg Val Ser Ser Arg Gly Phe His Leu Ala
 20 25 30

Leu Thr Ile Lys Met Thr Leu Ile Ser Trp Val Arg Lys Pro Ile Trp
 35 40 45

Glu Leu Cys Gln
 50

<210> 5094
 <211> 46
 <212> PRT
 <213> Homo sapiens

<400> 5094
 Met Lys Ser Gln Cys Tyr Ser Pro Ser Tyr Phe Ala Phe Phe Cys Leu
 1 5 10 15

Val Phe Phe Gln Ile Thr Ser Ala Ser Ser Gln Thr Leu Arg Gly His
 20 25 30

Val Leu Cys Arg Thr Thr Leu Arg Asp Ser Ser Ala Tyr Cys
 35 40 45

<210> 5095
 <211> 38
 <212> PRT
 <213> Homo sapiens

<400> 5095
 Met Phe Thr Cys Thr Ala Gly Leu Ser Cys Leu Phe Gln Phe Cys Phe
 1 5 10 15

Thr Cys Gly Val Phe Thr Asp Phe Lys Lys Glu Cys Met His Gly Val
 20 25 30

Glu Gln Asp Thr Val Ser
 35

<210> 5096
 <211> 55
 <212> PRT
 <213> Homo sapiens

<400> 5096
 Met Pro Ser Glu Ile Ile Tyr Leu Leu Ser Leu Leu Tyr Thr Ser Val
 1 5 10 15

Cys Leu Gln Gln Pro Pro Gln Pro Arg Trp Val Cys Phe Cys Phe Leu
 20 25 30

Gly Trp Gly Ala Gly Thr Gly Gly Gly Arg Arg Ala Gly Phe Arg Ser
 35 40 45

Leu Leu Ala Glu Pro Phe Val
 50 55

<210> 5097
 <211> 80
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (80)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5097
 Met Leu Val Leu Gly Leu Thr Lys Phe Ala Val Gly Ile Val Leu Ile
 1 5 10 15
 Leu Leu Val Arg Gln Leu Val Gln Asn Leu Ser Leu Gln Val Leu Tyr
 20 25 30
 Ser Trp Phe Lys Val Val Thr Arg Asn Lys Glu Ala Arg Arg Arg Leu
 35 40 45
 Glu Ile Glu Val Pro Tyr Lys Phe Val Thr Tyr Thr Ser Val Gly Ile
 50 55 60
 Cys Ala Thr Thr Phe Val Pro Met Leu His Arg Phe Leu Gly Leu Xaa
 65 70 75 80

<210> 5098
 <211> 50
 <212> PRT
 <213> Homo sapiens

<400> 5098
 Met Trp Gln Ser Cys Leu Cys Arg Phe Val Leu Leu Ile Glu Gly Leu
 1 5 10 15
 Glu Pro Gly Ala Leu Pro Ala Phe Pro Gly Ser Pro Ser Ser Arg His
 20 25 30
 Gly Leu Thr Val Ser His Val Glu Gly Leu Gly Ser Leu Met Lys Cys
 35 40 45
 Gly Leu
 50

<210> 5099
 <211> 13
 <212> PRT
 <213> Homo sapiens

<400> 5099

Met Trp Cys Pro Ala Phe Gly Arg Val Phe Cys Ser Arg
1 5 10

<210> 5100

<211> 35

<212> PRT

<213> Homo sapiens

<400> 5100

Met Pro Leu Leu Gln Trp Leu Ala Leu Leu Trp Pro Leu Leu Thr Thr
1 5 10 15

Glu Ala Pro Ser Gly Gly Cys Ser Gln Pro Gly Pro Gly Pro Arg Ser
20 25 30

Ser Leu Thr
35

<210> 5101

<211> 91

<212> PRT

<213> Homo sapiens

<400> 5101

Phe Leu Ile Ile Ile Ile Ser Ala Thr Val Met Phe Leu His Val Ser
1 5 10 15

Glu Arg His Cys Pro Cys Leu Arg Leu Glu Val Leu Ser Ala Lys Val
20 25 30

Phe Phe Ser Cys Ile Val Arg Ser Ile His Pro Leu Cys Ala Leu Ser
35 40 45

Ala Phe Glu Arg Leu Gly Cys Ser Gln Ala Ala Val Leu Arg Asp Leu
50 55 60

Lys Arg Asp Leu Val Ser Leu Gly Ala Glu Ser Ile Tyr Leu Gly Thr
65 70 75 80

Leu Phe Gln Glu Arg Pro Cys Leu His Phe His
85 90

<210> 5102

<211> 14

<212> PRT

<213> Homo sapiens

<400> 5102

Met Leu His Ser Arg Leu Tyr Ser Leu Val Gly Trp Leu Leu
1 5 10

<210> 5103

05550003-034704

<211> 26
<212> PRT
<213> Homo sapiens

<400> 5103
Met Arg Thr Tyr Leu Trp Ile Leu Thr Cys Ile Arg Thr Ser Val Gln
1 5 10 15
Gly Pro Leu Met Thr Met Ala Cys Pro Gly
20 25

<210> 5104
<211> 47
<212> PRT
<213> Homo sapiens

<400> 5104
Met Arg Asn Thr Ala Tyr Leu Pro Ile Ser Leu Leu Leu Val Gly Ser
1 5 10 15
Gly Leu Cys Leu Ala Gln Arg Ile Thr Leu Phe Thr Ser Gly Thr Phe
20 25 30
Arg Arg Lys Arg Leu Tyr Arg Asn Tyr Lys Ala Thr Gln Met Ser
35 40 45

<210> 5105
<211> 92
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5105
Met Ala Ser Gln Thr Ser Xaa Ile Ile Trp Pro Leu Ala Thr Leu Pro
1 5 10 15
His Pro Ile Ser Ser Phe Ala Leu Tyr Ser Ser Tyr Thr Xaa Arg Gly
20 25 30
Val Pro Lys Thr Ser Arg Trp Val Arg Pro Gln Asp Leu His Met Cys
35 40 45
Cys Ser Leu Tyr Leu His Arg Ser Phe Leu Phe Ser Cys Leu Leu Asn
50 55 60
Ser Tyr Leu Pro Ser Gly Leu Ile Ser Thr Phe Ser Pro Leu Leu Val
65 70 75 80

Cys Cys Ser Tyr Leu Arg Ser Asn Ser Arg Glu Met
85 90

<210> 5106
<211> 35
<212> PRT
<213> Homo sapiens

<400> 5106
Met Cys Leu Leu Trp Ser Trp Leu Trp Val Gln Pro Thr Leu Arg Cys
1 5 10 15

Val Phe Ile Phe His Tyr Lys Asn Tyr Lys Gln Leu Phe Ile Ser Arg
20 25 30

Gln Glu Phe
35

<210> 5107
<211> 39
<212> PRT
<213> Homo sapiens

<400> 5107
Met Lys Lys Leu Met Pro Arg Glu Phe Arg Gly Phe Ala Phe Arg Cys
1 5 10 15

Leu Thr Cys Arg Tyr Leu Ile Leu Leu Lys Ile Ser Leu Asp Ile Val
20 25 30

Ser Val Arg Cys Thr Asp Leu
35

<210> 5108
<211> 39
<212> PRT
<213> Homo sapiens

<400> 5108
Met Val Lys Asn Ala Leu Trp Asn Thr Leu His Ser Phe Leu Ser Arg
1 5 10 15

Leu Arg Phe Thr Ile Thr Ile Trp Lys Phe Leu Gly Cys Phe Gln Cys
20 25 30

Leu Gly Gly Ala Gln Lys Cys
35

<210> 5109
<211> 38
<212> PRT
<213> Homo sapiens

[illegible]

Ser Trp Glu His Lys Ala Lys Arg Pro Ser Ile Leu His Tyr Leu Leu
20 25 30

```
<210> 5110
<211> 32
<212> PRT
<213> Homo sapiens
```

Phe Glu Gln Leu Pro Met Ala Met Gly Leu Gly Leu Tyr Ser Arg Ala
20 25 30

```
<210> 5111
<211> 73
<212> PRT
<213> Homo sapiens
```

Ile Tyr Ile Pro Pro Leu Gln Arg Val Phe Gln Thr Glu Asn Leu Gly
20 25 30

Ala Leu Asp Leu Leu Phe Leu Thr Gly Leu Ala Ser Ser Val Phe Ile
35 40 45

Leu Ser Glu Leu Leu Lys Leu Cys Glu Lys Tyr Cys Cys Ser Pro Lys
50 55 60

Arg Val Gln Met His Pro Glu Asp Val
65 70

```
<210> 5112
<211> 13
<212> PRT
<213> Homo sapiens
```

```
<400> 5112
Met Cys Ser Cys Ser Trp Ala Ser Ser Cys Thr Val Trp
  1                               5               10
```

<210> 5113
 <211> 328
 <212> PRT
 <213> Homo sapiens

<400> 5113
 Met Ser Ser Leu Lys Val Ala Ala Thr Met Ile Ile Leu Lys Phe Ser
 1 5 10 15
 Met Ala Pro Thr Ala Val Pro Leu Ser Leu Leu Glu Phe Val Met Gly
 20 25 30
 Pro Glu Ala Pro Ser Leu Leu Pro Pro Thr Ser Cys Pro Phe Ala Ser
 35 40 45
 Ser Val Thr Thr Ala Ser Gln Gly Arg Gly Phe Arg Ala Glu Tyr Tyr
 50 55 60
 Ser Ser Pro Ser Asn Asp Ser Thr Asn Leu Leu Cys Leu Pro Asn His
 65 70 75 80
 Met Gln Ala Ser Val Ser Arg Ser Tyr Leu Gln Ser Leu Gly Phe Ser
 85 90 95
 Ala Ser Asp Leu Val Ile Ser Thr Trp Asn Gly Tyr Tyr Glu Cys Arg
 100 105 110
 Pro Gln Ile Thr Pro Asn Leu Val Ile Phe Thr Ile Pro Tyr Ser Gly
 115 120 125
 Cys Gly Thr Phe Lys Gln Ala Asp Asn Asp Thr Ile Asp Tyr Ser Asn
 130 135 140
 Phe Leu Thr Ala Ala Val Ser Gly Gly Ile Ile Lys Arg Arg Thr Asp
 145 150 155 160
 Leu Arg Ile His Val Ser Cys Arg Met Leu Gln Asn Thr Trp Val Asp
 165 170 175
 Thr Met Tyr Ile Ala Asn Asp Thr Ile His Val Ala Asn Asn Thr Ile
 180 185 190
 Gln Val Glu Glu Val Gln Tyr Gly Asn Phe Asp Val Asn Ile Ser Phe
 195 200 205
 Tyr Thr Ser Ser Ser Phe Leu Tyr Pro Val Thr Ser Arg Pro Tyr Tyr
 210 215 220
 Val Asp Leu Asn Gln Asp Leu Tyr Val Gln Ala Glu Ile Leu His Ser
 225 230 235 240
 Asp Ala Val Leu Thr Leu Phe Val Asp Thr Cys Val Ala Ser Pro Tyr
 245 250 255
 Ser Asn Asp Phe Thr Ser Leu Thr Tyr Asp Leu Ile Arg Ser Gly Cys
 260 265 270
 Val Arg Asp Asp Thr Tyr Gly Pro Tyr Ser Ser Pro Ser Leu Arg Ile
 275 280 285

Ala Arg Phe Arg Phe Arg Ala Phe His Phe Leu Asn Arg Phe Pro Ser
290 295 300

Val Tyr Leu Arg Cys Lys Met Val Val Cys Arg Ala Tyr Asp Pro Leu
305 310 315 320

Pro Ala Ala Thr Glu Ala Val Cys
325

<210> 5114
<211> 31
<212> PRT
<213> Homo sapiens

<400> 5114
Met Gln Gly Gln Gln Thr Phe Pro Val Lys Gly Gln Ile Gly Ser Ile
1 5 10 15

Phe Gly Phe Leu Gly Cys Leu Leu Leu Leu Leu Leu Trp Glu
20 25 30

<210> 5115
<211> 16
<212> PRT
<213> Homo sapiens

<400> 5115
Met Pro Phe Tyr Cys Leu Ser Leu Leu Leu Leu Phe Phe Lys Leu Ser
1 5 10 15

<210> 5116
<211> 109
<212> PRT
<213> Homo sapiens

<400> 5116
Met Gly Ser Thr Gln Val Ser Phe Phe Phe Leu Phe Ser Phe Leu Leu
1 5 10 15

Pro Ser Phe Leu His Ser Ser Leu Pro Pro Asn Leu Pro Pro Ser Leu
20 25 30

Pro Ser Leu Leu Pro Ser Phe Leu Asn Leu Gly Pro Pro Lys Ser Cys
35 40 45

Trp Asp Tyr Lys Ala Met Ser His Arg Gly Pro Ala Tyr Ile Pro Leu
50 55 60

Phe Leu Ile Ile Ser Phe Phe Ile Phe Ser Ile Leu Leu Thr Phe Ile
65 70 75 80

Leu Thr Phe Leu Ser Ala Met Lys Thr Ala Pro Asn Leu Pro His Leu
85 90 95

Arg Leu Ala Ile Phe Asp Ser Leu Met Gly Glu Val Gln
100 105

<210> 5117
<211> 31
<212> PRT
<213> Homo sapiens

<400> 5117
Met Tyr Val Phe Lys Thr Gln Leu Val Thr Cys Asp Cys Glu Ile Asp
1 5 10 15

Asn Thr Trp Met His Ser Cys Ser His Arg Ile Gly Asp Met Leu
20 25 30

<210> 5118
<211> 25
<212> PRT
<213> Homo sapiens

<400> 5118
Asp Ser Ile Pro Ala Ala Gly Glu Leu Gly Ile Val Phe Val Ala Phe
1 5 10 15

Phe Ile Leu Asp Glu Val Gln Lys Phe
20 25

<210> 5119
<211> 30
<212> PRT
<213> Homo sapiens

<400> 5119
Met Leu Thr Leu Phe Phe Lys Leu Leu Leu Ile Ser Ala Tyr Tyr Glu
1 5 10 15

Glu His Glu Cys Thr Val His Thr Asn Asn Leu Met Ser His
20 25 30

<210> 5120
<211> 20
<212> PRT
<213> Homo sapiens

<400> 5120
Met Thr Lys Pro Lys Pro Leu Leu Leu Ser Tyr Ile Phe Cys Phe His
1 5 10 15

Val Leu Ser Phe
20

20						25						30			
Ala	Trp	Gly	Ser	Ala	Thr	Arg	Glu	Glu	Gly	Phe	Asp	Arg	Ser	Thr	Ser
35						40						45			
Leu	Glu	Ser	Ser	Asp	Cys	Glu	Ser	Leu	Asp	Ser	Ser	Asn	Ser	Gly	Phe
50						55						60			
Gly	Pro	Glu	Glu	Asp	Thr	Ala	Tyr	Leu	Asp	Gly	Val	Ser	Leu	Pro	Asp
65						70						75			
Phe	Glu	Leu	Leu	Ser	Asp	Pro	Glu	Asp	Glu	His	Leu	Cys	Ala	Asn	Leu
			85						90			95			
Met	Gln	Leu	Leu	Gln	Glu	Ser	Leu	Ala	Gln	Ala	Arg	Leu	Gly	Ser	Arg
			100						105			110			
Arg	Pro	Ala	Arg	Leu	Leu	Met	Pro	Ser	Gln	Leu	Val	Ser	Gln	Val	Gly
			115						120			125			
Lys	Glu	Leu	Leu	Arg	Leu	Ala	Tyr	Ser	Glu	Pro	Cys	Gly	Leu	Arg	Gly
130						135						140			
Ala	Leu	Leu	Asp	Val	Cys	Val	Glu	Gln	Gly	Lys	Ser	Cys	His	Ser	Val
145						150						155			
Gly	Gln	Leu	Ala	Leu	Asp	Pro	Ser	Leu	Val	Pro	Thr	Phe	Gln	Leu	Thr
			165						170			175			
Leu	Val	Leu	Arg	Leu	Asp	Ser	Arg	Leu	Trp	Pro	Lys	Ile	Gln	Gly	Leu
			180						185			190			
Phe	Ser	Ser	Ala	Asn	Ser	Pro	Phe	Leu	Pro	Gly	Phe	Ser	Gln	Ser	Leu
			195						200			205			
Thr	Leu	Ser	Thr	Gly	Phe	Arg	Val	Ile	Lys	Lys	Lys	Leu	Tyr	Ser	Ser
210						215						220			
Glu	Gln	Leu	Leu	Ile	Glu	Glu	Cys								
225			230												

```
<210> 5125
<211> 232
<212> PRT
<213> Homo sapiens
```

<400> 5125															
Met	Pro	Ser	Leu	Trp	Asp	Arg	Phe	Ser	Ser	Ser	Ser	Thr	Ser	Ser	Ser
1				5				10						15	
Pro	Ser	Ser	Leu	Pro	Arg	Thr	Pro	Thr	Pro	Asp	Arg	Pro	Pro	Arg	Ser
			20					25					30		
Ala	Trp	Gly	Ser	Ala	Thr	Arg	Glu	Glu	Gly	Phe	Asp	Arg	Ser	Thr	Ser
		35					40					45			
Leu	Glu	Ser	Ser	Asp	Cys	Glu	Ser	Leu	Asp	Ser	Ser	Asn	Ser	Gly	Phe
	50					55					60				

Gly Ile Leu Gly Glu Lys Lys Met Val Phe Ser Phe
20 25

<210> 5128
<211> 23
<212> PRT
<213> Homo sapiens

<400> 5128
Lys Ala Ala Val Met Trp Gly His Trp Ala Leu Leu Phe Phe Ser Thr
1 5 10 15

Met Cys Met His Phe Gly Ala
20

<210> 5129
<211> 9
<212> PRT
<213> Homo sapiens

<400> 5129
Met Val Leu Ser Pro Leu Phe Ser Ala
1 5

<210> 5130
<211> 224
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (137)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5130
Met Glu Ser Gly Ala Tyr Gly Ala Ala Lys Ala Gly Gly Ser Phe Asp
1 5 10 15

Leu Arg Arg Phe Leu Thr Gln Pro Gln Val Val Ala Arg Ala Val Cys
20 25 30

Leu Val Phe Ala Leu Ile Val Phe Ser Cys Ile Tyr Gly Glu Gly Tyr
35 40 45

Ser Asn Ala His Glu Ser Lys Gln Met Tyr Cys Val Phe Asn Arg Asn
50 55 60

Glu Asp Ala Cys Arg Tyr Gly Ser Ala Ile Gly Val Leu Ala Phe Leu
65 70 75 80

Ala Ser Ala Phe Phe Leu Val Val Asp Ala Tyr Phe Pro Gln Ile Ser
85 90 95

Asn Ala Thr Asp Arg Lys Tyr Leu Val Ile Gly Asp Leu Leu Phe Ser
100 105 110

Ala Leu Trp Thr Phe Leu Trp Phe Val Gly Phe Cys Phe Leu Thr Asn
115 120 125

Gln Trp Ala Val Thr Asn Pro Lys Xaa Val Leu Val Gly Ala Asp Ser
130 135 140

Val Arg Ala Ala Ile Thr Phe Ser Phe Phe Ser Ile Phe Ser Trp Gly
145 150 155 160

Val Leu Ala Ser Leu Ala Tyr Gln Arg Tyr Lys Ala Gly Val Asp Asp
165 170 175

Phe Ile Gln Asn Tyr Val Asp Pro Thr Pro Asp Pro Asn Thr Ala Tyr
180 185 190

Ala Ser Tyr Pro Gly Ala Ser Val Asp Asn Tyr Gln Gln Pro Pro Phe
195 200 205

Thr Gln Asn Ala Glu Thr Thr Glu Gly Tyr Gln Pro Pro Pro Val Tyr
210 215 220

<210> 5131
<211> 13
<212> PRT
<213> Homo sapiens

<400> 5131
Met Glu Gly Thr Gly Ser Gly Asn Gly Arg Tyr Cys Met
1 5 10

<210> 5132
<211> 10
<212> PRT
<213> Homo sapiens

<400> 5132
Met Phe Val Gly Cys Ile Asn Val Phe Phe
1 5 10

<210> 5133
<211> 486
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (200)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5133
Arg Pro Pro Arg Val Arg Ala Thr Lys Met Ala Ala Pro Ile Leu Arg

1					5					10					15				
Ser	Phe	Ser	Trp	Gly	Arg	Trp	Ser	Gly	Thr	Leu	Asn	Leu	Ser	Val	Leu				
			20							25				30					
Leu	Pro	Leu	Gly	Leu	Arg	Lys	Ala	His	Ser	Gly	Ala	Gln	Gly	Leu	Leu				
		35							40				45						
Ala	Ala	Gln	Lys	Ala	Arg	Gly	Leu	Phe	Lys	Asp	Phe	Phe	Pro	Glu	Thr				
		50				55							60						
Gly	Thr	Lys	Ile	Glu	Leu	Pro	Glu	Leu	Phe	Asp	Arg	Gly	Thr	Ala	Ser				
		65				70							75						
Phe	Pro	Gln	Thr	Ile	Tyr	Cys	Gly	Phe	Asp	Pro	Thr	Ala	Asp	Ser	Leu				
						85				90				95					
His	Val	Gly	His	Leu	Leu	Ala	Leu	Leu	Gly	Leu	Phe	His	Leu	Gln	Arg				
					100				105				110						
Ala	Gly	His	Asn	Val	Ile	Ala	Leu	Val	Gly	Gly	Ala	Thr	Ala	Arg	Leu				
					115				120				125						
Gly	Asp	Pro	Ser	Gly	Arg	Thr	Lys	Glu	Arg	Glu	Ala	Leu	Glu	Thr	Glu				
								135				140							
Arg	Val	Arg	Ala	Asn	Ala	Arg	Ala	Leu	Arg	Leu	Gly	Leu	Glu	Ala	Leu				
								150				155							
Ala	Ala	Asn	His	Gln	Gln	Leu	Phe	Thr	Asp	Gly	Arg	Ser	Trp	Gly	Ser				
											170				175				
Phe	Thr	Val	Leu	Asp	Asn	Ser	Ala	Trp	Tyr	Gln	Lys	Gln	His	Leu	Val				
											185				190				
Asp	Phe	Leu	Ala	Ala	Val	Gly	Xaa	His	Phe	Arg	Met	Gly	Thr	Leu	Leu				
								200							205				
Ser	Arg	Gln	Ser	Val	Gln	Leu	Arg	Leu	Lys	Ser	Pro	Glu	Gly	Met	Ser				
								215				220							
Leu	Ala	Glu	Phe	Phe	Tyr	Gln	Val	Leu	Gln	Ala	Tyr	Asp	Phe	Tyr	Tyr				
								230				235				240			
Leu	Phe	Gln	Arg	Tyr	Gly	Cys	Arg	Val	Gln	Leu	Gly	Gly	Ser	Asp	Gln				
											250				255				
Leu	Gly	Asn	Ile	Met	Ser	Gly	Tyr	Glu	Phe	Ile	Asn	Lys	Leu	Thr	Gly				
											265				270				
Glu	Asp	Val	Phe	Gly	Ile	Thr	Val	Pro	Leu	Ile	Thr	Ser	Thr	Thr	Gly				
											280				285				
Ala	Lys	Leu	Gly	Lys	Ser	Ala	Gly	Asn	Ala	Val	Trp	Leu	Asn	Arg	Asp				
								295							300				
Lys	Thr	Ser	Pro	Phe	Glu	Leu	Tyr	Gln	Phe	Phe	Val	Arg	Gln	Pro	Asp				
								310				315				320			
Asp	Ser	Val	Glu	Arg	Tyr	Leu	Lys	Leu	Phe	Thr	Phe	Leu	Pro	Leu	Pro				
											330				335				

Glu Ile Asp His Ile Met Gln Leu His Val Lys Glu Pro Glu Arg Arg
340 345 350

Gly Pro Gln Lys Arg Leu Ala Ala Glu Val Thr Lys Leu Val His Gly
355 360 365

Arg Glu Gly Leu Asp Ser Ala Lys Arg Cys Thr Gln Ala Leu Tyr His
370 375 380

Ser Ser Ile Asp Ala Leu Glu Val Met Ser Asp Gln Glu Leu Lys Glu
385 390 395 400

Leu Phe Lys Glu Ala Pro Phe Ser Glu Phe Phe Leu Asp Pro Gly Thr
405 410 415

Ser Val Leu Asp Thr Cys Arg Lys Ala Asn Ala Ile Pro Asp Gly Pro
420 425 430

Arg Gly Tyr Arg Met Ile Thr Glu Gly Gly Val Ser Ile Asn His Gln
435 440 445

Gln Val Thr Asn Pro Glu Ser Val Leu Ile Val Gly Gln His Ile Leu
450 455 460

Lys Asn Gly Leu Ser Leu Leu Lys Ile Gly Lys Arg Asn Phe Tyr Ile
465 470 475 480

Ile Lys Trp Leu Gln Leu
485

<210> 5134
<211> 388
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (102)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (114)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (121)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5134
Gly His Leu Leu Ala Leu Leu Gly Leu Phe His Leu Gln Arg Ala Gly
1 5 10 15

His Asn Val Ile Ala Leu Val Gly Gly Ala Thr Ala Arg Leu Gly Asp
20 25 30

Pro Ser Gly Arg Thr Lys Glu Arg Glu Ala Leu Glu Thr Glu Arg Val

35							40					45				
Arg	Ala 50	Asn	Ala	Arg	Ala	Leu 55	Arg	Leu	Gly	Leu	Glu 60	Ala	Leu	Ala	Ala	
Asn 65	His	Gln	Gln	Leu	Phe 70	Thr	Asp	Gly	Arg	Ser 75	Trp	Gly	Ser	Phe	Thr 80	
Val	Leu	Asp	Asn	Ser 85	Ala	Trp	Tyr	Gln	Lys 90	Gln	His	Leu	Val	Asp 95	Phe	
Leu	Ala	Ala	Val 100	Gly	Xaa	His	Phe	Arg 105	Met	Gly	Thr	Leu	Leu	Ser	Arg	
Gln	Xaa	Val 115	Gln	Leu	Arg	Leu	Lys 120	Xaa	Pro	Glu	Gly	Met 125	Ser	Leu	Ala	
Glu	Phe 130	Phe	Tyr	Gln	Val 135	Leu	Gln	Ala	Tyr	Asp	Phe 140	Tyr	Tyr	Leu	Phe	
Gln 145	Arg	Tyr	Gly	Cys	Arg 150	Val	Gln	Leu	Gly	Gly 155	Ser	Asp	Gln	Leu	Gly 160	
Asn	Ile	Met	Ser	Gly 165	Tyr	Glu	Phe	Ile	Asn 170	Lys	Leu	Thr	Gly	Glu 175	Asp	
Val	Phe	Gly	Ile 180	Thr	Val	Pro	Leu	Ile 185	Thr	Ser	Thr	Thr	Gly 190	Ala	Lys	
Leu	Gly	Lys 195	Ser	Ala	Gly	Asn	Ala 200	Val	Trp	Leu	Asn	Arg 205	Asp	Lys	Thr	
Ser	Pro 210	Phe	Glu	Leu	Tyr	Gln 215	Phe	Phe	Val	Arg	Gln 220	Pro	Asp	Asp	Ser	
Val 225	Glu	Arg	Tyr	Leu	Lys 230	Leu	Phe	Thr	Phe	Leu 235	Pro	Leu	Pro	Glu	Ile 240	
Asp	His	Ile	Met	Gln 245	Leu	His	Val	Lys	Glu 250	Pro	Glu	Arg	Arg	Gly 255	Pro	
Gln	Lys	Arg	Leu 260	Ala	Ala	Glu	Val	Thr 265	Lys	Leu	Val	His	Gly 270	Arg	Glu	
Gly	Leu	Asp 275	Ser	Ala	Lys	Arg	Cys 280	Thr	Gln	Ala	Leu	Tyr 285	His	Ser	Ser	
Ile 290	Asp	Ala	Leu	Glu	Val	Met 295	Ser	Asp	Gln	Glu	Leu 300	Lys	Glu	Leu	Phe	
Lys 305	Glu	Ala	Pro	Phe	Ser 310	Glu	Phe	Phe	Leu	Asp 315	Pro	Gly	Thr	Ser	Val 320	
Leu	Asp	Thr	Cys	Arg 325	Lys	Ala	Asn	Ala	Ile 330	Pro	Asp	Gly	Pro	Arg 335	Gly	
Tyr	Arg	Met	Ile 340	Thr	Glu	Gly	Gly	Val 345	Ser	Ile	Asn	His	Gln 350	Gln	Val	
Thr	Asn	Pro 355	Glu	Ser	Val	Leu	Ile 360	Val	Gly	Gln	His	Ile 365	Leu	Lys	Asn	

255

Leu Pro Val Thr Glu Arg Leu Gln Thr Cys Leu Asp Lys Cys
500 505 510

<213> Homo sapiens

Met Leu Leu Leu Ala Phe Val Thr Ser Phe Phe Tyr Leu Leu Tyr Ser
1 5 10 15

<400> 5140

Met Glu Val Met Asp Ile Leu Met Ala Leu Ala Thr Asp Thr Val Ile
 1 5 10 15
 Pro Ser Leu Met Val Leu
 20

<210> 5141

<211> 72

<212> PRT

<213> Homo sapiens

<400> 5141

Met Gly Leu Leu Trp Ala Leu Leu Pro Trp Leu Leu Arg Cys Arg Asn
 1 5 10 15
 Cys Glu Gly Arg Ala Ala Cys His Gly Ala Gln His Arg Ala Gly Leu
 20 25 30
 Asp Arg Tyr Lys Trp Asn Arg Arg Ile Ser Trp Glu Gly His Arg Glu
 35 40 45
 Lys Glu Leu Leu Val Thr Ala Leu Ser His Leu Leu Leu Phe Asn Thr
 50 55 60
 Trp Lys Gly Val Glu Thr Gln Gly
 65 70

<210> 5142

<211> 487

<212> PRT

<213> Homo sapiens

<400> 5142

Met Phe Pro Leu Thr Trp Val Phe Leu Ala Leu Tyr Phe Ser Arg His
 1 5 10 15
 Gln Val Arg Gly Gln Pro Asp Pro Pro Cys Gly Gly Arg Leu Asn Ser
 20 25 30
 Lys Asp Ala Gly Tyr Ile Thr Ser Pro Gly Tyr Pro Gln Asp Tyr Pro
 35 40 45
 Ser His Gln Asn Cys Glu Trp Ile Val Tyr Ala Pro Glu Pro Asn Gln
 50 55 60
 Lys Ile Val Leu Asn Phe Asn Pro His Phe Glu Ile Glu Lys His Asp
 65 70 75 80
 Cys Lys Tyr Asp Phe Ile Glu Ile Arg Asp Gly Asp Ser Glu Ser Ala
 85 90 95
 Asp Leu Leu Gly Lys His Cys Gly Asn Ile Ala Pro Pro Thr Ile Ile
 100 105 110
 Ser Ser Gly Ser Met Leu Tyr Ile Lys Phe Thr Ser Asp Tyr Ala Arg
 115 120 125

Gln	Gly	Ala	Gly	Phe	Ser	Leu	Arg	Tyr	Glu	Ile	Phe	Lys	Thr	Gly	Ser
130						135					140				
Glu	Asp	Cys	Ser	Lys	Asn	Phe	Thr	Ser	Pro	Asn	Gly	Thr	Ile	Glu	Ser
145					150					155					160
Pro	Gly	Phe	Pro	Glu	Lys	Tyr	Pro	His	Asn	Leu	Asp	Cys	Thr	Phe	Thr
				165					170					175	
Ile	Leu	Ala	Lys	Pro	Lys	Met	Glu	Ile	Ile	Leu	Gln	Phe	Leu	Ile	Phe
			180					185					190		
Asp	Leu	Glu	His	Asp	Pro	Leu	Gln	Val	Gly	Glu	Gly	Asp	Cys	Lys	Tyr
		195					200					205			
Asp	Trp	Leu	Asp	Ile	Trp	Asp	Gly	Ile	Pro	His	Val	Gly	Pro	Leu	Ile
	210					215					220				
Gly	Lys	Tyr	Cys	Gly	Thr	Lys	Thr	Pro	Ser	Glu	Leu	Arg	Ser	Ser	Thr
225					230					235					240
Gly	Ile	Leu	Ser	Leu	Thr	Phe	His	Thr	Asp	Met	Ala	Val	Ala	Lys	Asp
				245					250					255	
Gly	Phe	Ser	Ala	Arg	Tyr	Tyr	Leu	Val	His	Gln	Glu	Pro	Leu	Glu	Asn
			260					265					270		
Phe	Gln	Cys	Asn	Val	Pro	Leu	Gly	Met	Glu	Ser	Gly	Arg	Ile	Ala	Asn
		275					280					285			
Glu	Gln	Ile	Ser	Ala	Ser	Ser	Thr	Tyr	Ser	Asp	Gly	Arg	Trp	Thr	Pro
	290					295					300				
Gln	Gln	Ser	Arg	Leu	His	Gly	Asp	Asp	Asn	Gly	Trp	Thr	Pro	Asn	Leu
305					310					315					320
Asp	Ser	Asn	Lys	Glu	Tyr	Leu	Gln	Val	Asp	Leu	Arg	Phe	Leu	Thr	Met
				325					330					335	
Leu	Thr	Ala	Ile	Ala	Thr	Gln	Gly	Ala	Ile	Ser	Arg	Glu	Thr	Gln	Asn
			340					345					350		
Gly	Tyr	Tyr	Val	Lys	Ser	Tyr	Lys	Leu	Glu	Val	Ser	Thr	Asn	Gly	Glu
		355					360					365			
Asp	Trp	Met	Val	Tyr	Arg	His	Gly	Lys	Asn	His	Lys	Val	Phe	Gln	Ala
	370					375					380				
Asn	Asn	Asp	Ala	Thr	Glu	Val	Val	Leu	Asn	Lys	Leu	His	Ala	Pro	Leu
385					390					395					400
Leu	Thr	Arg	Phe	Val	Arg	Ile	Arg	Pro	Gln	Thr	Trp	His	Ser	Gly	Ile
				405					410					415	
Ala	Leu	Arg	Leu	Glu	Leu	Phe	Gly	Cys	Arg	Ser	Gln	Met	Leu	Pro	Ala
			420					425					430		
Pro	Thr	Cys	Trp	Gly	Cys	Ser	Gln	Ala	Ser	Leu	Gln	Thr	Pro	Arg	Ser
		435					440					445			

Pro Pro Leu Pro Pro Arg Asn Thr Ser Gly Ala Pro Val Gln Pro Ala
450 455 460

Trp Ser Ala Ala Ala Arg Ala Gly Ser Leu Glu Ser Leu Arg Pro Ser
465 470 475 480

Pro Val Arg Ser Gly Phe Arg
485

<210> 5143
<211> 33
<212> PRT
<213> Homo sapiens

<400> 5143
Met Pro Ile His Arg Phe Ser Val Leu Ala Leu Leu Val Met Pro Pro
1 5 10 15

Leu Met Asn Gly Arg Gln Val Gln Val Lys Glu Trp Cys Phe Trp Asn
20 25 30

Pro

<210> 5144
<211> 41
<212> PRT
<213> Homo sapiens

<400> 5144
Val Gly Gly Trp Ser Trp Val Trp Ser Pro Trp Leu Ala Ala Phe Val
1 5 10 15

Cys Ala Arg Ala Ala Arg Asp Pro Gly Pro Ser Val Arg Trp Arg Pro
20 25 30

Pro Phe Ala Arg Ser Trp Arg Arg Pro
35 40

<210> 5145
<211> 26
<212> PRT
<213> Homo sapiens

<400> 5145
Asp Val Val Cys Leu Phe Leu Phe Val Tyr Val Leu Ile Lys His Val
1 5 10 15

Asp Tyr Phe Tyr Lys Thr Lys Gly Lys Met
20 25

<210> 5146
<211> 26

<212> PRT
<213> Homo sapiens

<400> 5146
Met Gly Thr Cys Thr Trp Ala Leu Ser Gly Pro Pro Ser Ser Ala Asp
1 5 10 15
Ser Ala Ser Arg Leu Phe Ser Pro Pro Arg
20 25

<210> 5147
<211> 52
<212> PRT
<213> Homo sapiens

<400> 5147
Met Ile Ile Tyr Val Glu Asn Pro Lys Glu Leu Thr Thr Lys Leu Leu
1 5 10 15
Lys Val Phe Leu Val Leu Ile Ser Gln Leu Ala Arg Leu Lys Asp Thr
20 25 30
Arg Leu Ile His Lys Ser Gln Ser Leu Phe Tyr Met Ala Ser Thr Asn
35 40 45
Glu Thr Arg Ser
50

<210> 5148
<211> 19
<212> PRT
<213> Homo sapiens

<400> 5148
Met Trp Ser Leu Lys Tyr Ser Ser Tyr Lys Ile Phe Val Leu Leu Ile
1 5 10 15
Phe Ala Gly

<210> 5149
<211> 69
<212> PRT
<213> Homo sapiens

<400> 5149
Met Asp Gly Gly Gln Ala Val Pro Thr Leu Leu Gly Gly Ala Gly Leu
1 5 10 15
Gly Gly Val Phe His Cys Val Pro Phe Ser Pro Arg Pro Val Pro Arg
20 25 30
Val Trp Gly Ala Leu Leu Arg Thr Pro Pro Arg Ala Pro Ser Ser Arg
35 40 45

Leu Trp Thr Pro Arg Gln Glu Arg Pro Ser Ala Ala Lys Arg Asn Lys
 50 55 60

Ile Leu Ala Ser Arg
 65

<210> 5150
 <211> 25
 <212> PRT
 <213> Homo sapiens

<400> 5150
 Met Ile Val Leu Ile Cys Val Ile Val Phe Ile Ile Ile Leu Phe Ile
 1 5 10 15

Val Leu Phe Ala Thr Gly Ala Phe Ser
 20 25

<210> 5151
 <211> 38
 <212> PRT
 <213> Homo sapiens

<400> 5151
 Met Lys Ala Val Ile His Gln Lys Tyr Gly Phe Leu His Leu Leu Phe
 1 5 10 15

Leu Leu Phe Leu Ser Leu His Arg Ile Ser Ser Ala Thr Phe Thr Leu
 20 25 30

Asn Thr Lys Ser Ser Ser
 35

<210> 5152
 <211> 22
 <212> PRT
 <213> Homo sapiens

<400> 5152
 Phe Leu Phe Phe Gly Val Leu Pro Val Cys Lys Gly Glu Phe Val His
 1 5 10 15

Trp Glu Arg Pro Gly Ser
 20

<210> 5153
 <211> 92
 <212> PRT
 <213> Homo sapiens

<400> 5153
 Met Ala Leu Ala Val Leu Ser Pro Cys Pro Pro Leu Val Gly Thr Ser
 1 5 10 15

Ala Gly Val Val Leu Val Val Leu Ser Trp Val Leu Cys Leu Gly Val
20 25 30
Phe Ser Tyr Val Lys Val Ala Ala Ser Ser Leu Leu His Gly Gly Gly
35 40 45
Arg Pro Ala Leu Leu Ala Ala Gly Val Ala Ile Gln Val Gly Ser Leu
50 55 60
Leu Gly Ala Val Ala Met Phe Pro Pro Thr Ser Ile Tyr His Val Phe
65 70 75 80
His Ser Arg Lys Asp Cys Ala Asp Pro Cys Asp Ser
85 90

<210> 5154
<211> 87
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (69)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5154
Met Asn Gly Arg His Arg Phe Cys Phe Leu Arg Cys Cys Gly Cys Val
1 5 10 15
Phe Ser Glu Arg Ala Leu Lys Glu Ile Lys Ala Glu Val Cys His Thr
20 25 30
Cys Gly Ala Ala Phe Gln Glu Asp Asp Val Ile Val Leu Asn Gly Thr
35 40 45
Lys Glu Asp Val Asp Val Leu Lys Thr Arg Met Glu Glu Arg Arg Leu
50 55 60
Arg Ala Lys Leu Xaa Lys Glu Asn Lys Glu Thr Gln Gly Ser Arg Val
65 70 75 80
Cys Phe Lys Thr Arg Cys Gln
85

<210> 5155
<211> 25
<212> PRT
<213> Homo sapiens

<400> 5155
Met Cys Trp Val Leu Phe Phe Ser Pro Gly Leu Leu Phe Leu Ser Leu
1 5 10 15
Leu Cys Pro Asp Phe Phe Ser Phe Phe
20 25

0950000-094304

<210> 5156
 <211> 31
 <212> PRT
 <213> Homo sapiens

<400> 5156
 Met Arg Cys Phe Leu Phe Leu Leu Gly Gly Ala Arg Phe Ile Cys Gln
 1 5 10 15
 Leu Ser Thr Val Arg Lys His Phe Gly Ser Pro Leu Ser Asp Ile
 20 25 30

<210> 5157
 <211> 15
 <212> PRT
 <213> Homo sapiens

<400> 5157
 Met Pro Phe Asn Lys Arg Ser His Ser Pro Ala Ala Leu Cys Pro
 1 5 10 15

<210> 5158
 <211> 62
 <212> PRT
 <213> Homo sapiens

<400> 5158
 Arg Arg Ala Val Arg Trp Glu Leu Leu Val Leu Leu Leu Leu Leu
 1 5 10 15
 Pro Thr Leu Arg Arg Pro Gly Pro Arg Cys Arg Pro Gly Pro Gly Cys
 20 25 30
 Arg Leu Arg Pro Arg Arg Pro Arg Pro Arg Val Arg Pro Ser Gln Asp
 35 40 45
 Ala Ala Pro Gly Arg Val Ser Thr Ser Trp Pro His Leu Pro
 50 55 60

<210> 5159
 <211> 22
 <212> PRT
 <213> Homo sapiens

<400> 5159
 Met Ile Gln Trp Phe His Lys Gly Leu Phe Pro Phe Gly Ser Ala Leu
 1 5 10 15
 Leu Leu Val Ala Ala Met
 20

<210> 5160
 <211> 405
 <212> PRT
 <213> Homo sapiens

<400> 5160
 Met Gly Phe Cys Leu Ser Ser Leu Leu Ala Trp Cys Val Asp Cys Phe
 1 5 10 15
 Phe Ser Leu Cys Ser Phe Gly Val Lys Leu Met Asp Phe Gln Ala His
 20 25 30
 Arg Arg Gly Gly Thr Leu Asn Arg Lys His Ile Ser Pro Ala Phe Gln
 35 40 45
 Pro Pro Leu Pro Pro Thr Asp Gly Ser Thr Val Val Pro Ala Gly Pro
 50 55 60
 Glu Pro Pro Pro Gln Ser Ser Arg Ala Glu Ser Ser Ser Gly Gly Gly
 65 70 75 80
 Thr Val Pro Ser Ser Ala Gly Ile Leu Glu Gln Gly Pro Ser Pro Gly
 85 90 95
 Asp Gly Ser Pro Pro Lys Pro Lys Asp Pro Val Ser Ala Ala Val Pro
 100 105 110
 Ala Pro Gly Arg Asn Asn Ser Gln Ile Ala Ser Gly Gln Asn Gln Pro
 115 120 125
 Gln Ala Ala Ala Gly Ser His Gln Leu Ser Met Gly Gln Pro His Asn
 130 135 140
 Ala Ala Gly Pro Ser Pro His Thr Leu Arg Arg Ala Val Lys Lys Pro
 145 150 155 160
 Ala Pro Ala Pro Pro Lys Pro Gly Asn Pro Pro Pro Gly His Pro Gly
 165 170 175
 Gly Gln Ser Ser Ser Gly Thr Ser Gln His Pro Pro Ser Leu Ser Pro
 180 185 190
 Lys Pro Pro Thr Arg Ser Pro Ser Pro Pro Thr Gln His Thr Gly Gln
 195 200 205
 Pro Pro Gly Gln Pro Ser Ala Pro Ser Gln Leu Ser Ala Pro Arg Arg
 210 215 220
 Tyr Ser Ser Ser Leu Ser Pro Ile Gln Ala Pro Asn His Pro Pro Pro
 225 230 235 240
 Gln Pro Pro Thr Gln Ala Thr Pro Leu Met His Thr Lys Pro Asn Ser
 245 250 255
 Gln Gly Pro Pro Asn Pro Met Ala Leu Pro Ser Glu His Gly Leu Glu
 260 265 270
 Gln Pro Ser His Thr Pro Pro Gln Thr Pro Thr Pro Pro Ser Thr Pro
 275 280 285
 Pro Leu Gly Lys Gln Asn Pro Ser Leu Pro Ala Pro Gln Thr Leu Ala

<210> 5163
 <211> 60
 <212> PRT
 <213> Homo sapiens

<400> 5163
 Met Ser Pro Thr Gly Leu Leu Val Val Phe Ala Pro Val Val Leu Gly
 1 5 10 15
 Leu Lys Ala Ile Thr Leu Ala Ala Leu Leu Leu Ala Leu Ala Thr Ser
 20 25 30
 Arg Arg Ser Pro Gly Gln Glu Asp Val Lys Thr Thr Gly Pro Ala Gly
 35 40 45
 Ala Met Asn Thr Leu Ala Trp Ser Lys Gly Gln Glu
 50 55 60

<210> 5164
 <211> 54
 <212> PRT
 <213> Homo sapiens
 <220>
 <221> SITE
 <222> (24)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (25)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5164
 Met Leu Cys Ile Ser Val Phe Cys Leu Leu Met Thr Leu Leu Phe Pro
 1 5 10 15
 Phe Val Leu Val Val Leu Tyr Xaa Xaa Leu Thr Phe Arg Ser Ser Trp
 20 25 30
 Gln Tyr Cys Phe Leu His Phe Ile Trp Asp Leu Ser Leu Phe Leu Ile
 35 40 45
 Asp His Val Cys His Cys
 50

<210> 5165
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 5165
 Met Arg Gly Leu Lys Pro Ser Trp Pro Gln Ala Ser Leu Ser Pro Pro
 1 5 10 15

Pro His Ala Leu Pro Cys Pro Cys Arg Val Ala Met Gly Phe
 20 25 30

<210> 5166
 <211> 44
 <212> PRT
 <213> Homo sapiens

<400> 5166
 Met Asn Asn Thr Cys Leu Ala Val Leu His Val Val Met Cys Leu Ala
 1 5 10 15
 Trp Ser Phe Leu Trp Ser Leu Leu Leu His Gly Phe Ile His Ser Phe
 20 25 30
 Phe Ser Phe Ile Ser Ser Cys Ala Val Thr Cys Thr
 35 40

<210> 5167
 <211> 38
 <212> PRT
 <213> Homo sapiens

<400> 5167
 Met Ser Ser Phe Ser Ser Ala Leu Phe Cys Pro Leu Phe Phe Gly Ser
 1 5 10 15
 His Phe Phe Leu Ser Ile Trp Val Gln Met Ala Phe Tyr Met Ile Glu
 20 25 30
 Asn Cys Lys Gly Lys Arg
 35

<210> 5168
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 5168
 Met Met Ala Met Leu Tyr Thr Met Leu Ala Leu Asp Ile Leu Val Cys
 1 5 10 15
 Gly

<210> 5169
 <211> 34
 <212> PRT
 <213> Homo sapiens

<400> 5169
 Met Leu Trp Phe Trp Gly Leu Trp Leu Gln Leu Trp Met Trp Gln Leu

1 5 10 15
 Trp Val Leu Leu Phe Gly Asn Tyr Pro His Glu Val Pro Arg Ser Cys
 20 25 30

Met Leu

<210> 5170
 <211> 61
 <212> PRT
 <213> Homo sapiens

<400> 5170
 Met Glu Leu Val Leu Ala Ala Ala Gly Ala Leu Leu Phe Cys Gly Phe
 1 5 10 15
 Ile Ile Tyr Asp Thr His Ser Leu Met His Lys Leu Ser Pro Glu Glu
 20 25 30
 Tyr Val Leu Ala Ala Ile Ser Leu Tyr Leu Asp Ile Ile Asn Leu Phe
 35 40 45
 Leu His Leu Leu Arg Phe Leu Glu Ala Val Asn Lys Lys
 50 55 60

<210> 5171
 <211> 61
 <212> PRT
 <213> Homo sapiens

<400> 5171
 Met Pro Thr Thr Val Pro Ser Ser Met Phe Pro Cys Ser Leu Phe Leu
 1 5 10 15
 Leu Trp Ser Gln Leu Trp Glu Leu Leu Trp Ser Gln Leu Trp Gly Leu
 20 25 30
 Leu Gln Leu Trp Gly Trp Trp Leu Leu Pro Glu Pro Pro Gln Ala Pro
 35 40 45
 Ser Leu Pro Pro Ala Pro Ala Pro Glu Pro Arg Leu Leu
 50 55 60

<210> 5172
 <211> 40
 <212> PRT
 <213> Homo sapiens

<400> 5172
 Met Thr Ser Met Leu Leu Leu Val Arg Trp Ile Pro Lys Leu Leu Leu
 1 5 10 15
 Leu Leu Leu Ser Cys Met Ala Pro Gly Tyr Trp Gly Arg Ser Leu Leu
 20 25 30

Phe Leu Ile Leu Lys Ala Gly Leu
35 40

<210> 5173
<211> 59
<212> PRT
<213> Homo sapiens

<400> 5173
Pro His Leu Pro Leu Met Ile Val Asn Leu Ile Leu His Phe Ser Cys
1 5 10 15

Tyr Cys Trp Cys Lys Lys His Leu Leu Tyr Gln Asp Phe Lys Asn Gln
20 25 30

Ser Asp Lys Ser Leu Ile Ser Leu Ile Ile Ile Thr Asp Lys Ser Ile
35 40 45

Glu Phe Ala Ser Asp Tyr Phe Phe Phe Ser Ser
50 55

<210> 5174
<211> 11
<212> PRT
<213> Homo sapiens

<400> 5174
Met Gly Phe Glu Pro Gly Trp Pro Gly Lys Leu
1 5 10

<210> 5175
<211> 39
<212> PRT
<213> Homo sapiens

<400> 5175
Met Leu Leu Glu Lys Val Ile Arg Leu Arg Cys Ser Cys Phe Val Leu
1 5 10 15

Leu Cys Phe Ser Leu Ser Trp Val Gly Val Ser Ser Ser Asn Asp Val
20 25 30

Gln Val Asp Leu Phe Ser His
35

<210> 5176
<211> 71
<212> PRT
<213> Homo sapiens

<400> 5176
Met Asn Gly Lys Trp Ser Leu Met Cys Ser Val Ser Leu Val Ala Leu

095003.09304

1	5	10	15
Gln Leu Thr Val Ala Pro Ala Gly His Pro Ala Gln Asn Ala Gln Lys			
20	25	30	
Arg Thr Met His Thr Cys Thr Ala Phe Glu Ser His Glu Leu Glu Ala			
35	40	45	
Val Val Arg Ala Ser Lys Glu Pro Thr Val Trp Cys Ala Val Gly Ile			
50	55	60	
Trp Arg Gly Arg Gly Pro Gly			
65	70		

<210> 5177
 <211> 10
 <212> PRT
 <213> Homo sapiens

<400> 5177
 Met Pro Gly Ala Ser Arg Ser Val Cys Leu
 1 5 10

<210> 5178
 <211> 39
 <212> PRT
 <213> Homo sapiens

<400> 5178
 Gly Val Ser Lys Arg Phe Pro Val Ala Ala Thr Arg Thr Ala Trp Tyr
 1 5 10 15
 Cys Leu His Val Leu Ser Tyr Phe Cys Phe Ala Leu Leu Gln Leu Leu
 20 25 30
 Ala Val Gly Pro Trp Arg Asn
 35

<210> 5179
 <211> 31
 <212> PRT
 <213> Homo sapiens

<400> 5179
 Met Trp Pro Leu Arg Leu Leu Cys Thr Ser Trp Ser Phe Leu Arg Ser
 1 5 10 15
 Pro Phe Leu Gly Leu Ala Arg Leu Lys Lys Lys Thr Ser Ser Phe
 20 25 30

<210> 5180
 <211> 20
 <212> PRT

<213> Homo sapiens

<400> 5180

Met Leu His Cys Tyr Pro Ala Leu Pro Ser Leu Ile Phe Leu Gly Val
1 5 10 15

Ala Trp Gly Phe
20

<210> 5181

<211> 74

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (33)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (74)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5181

Met Phe Thr Tyr Trp Phe Thr Met Leu Phe Met Cys Lys Leu Ser Lys
1 5 10 15

Cys Lys Leu Asn Ile Asn Val His Ala Leu Pro Lys Lys Lys Lys Lys
20 25 30

Xaa Ser Arg Gly Gly Pro Val Pro Asn Ser Pro Tyr Ser Glu Ser Tyr
35 40 45

Tyr Asn Ser Leu Ala Val Val Leu Gln Arg Arg Asp Trp Gly Asn Pro
50 55 60

Gly Val Thr Gln Leu Asn Arg Leu Ala Xaa
65 70

<210> 5182

<211> 13

<212> PRT

<213> Homo sapiens

<400> 5182

Gly Asn Lys Arg Ile Lys Arg Leu Met Pro Tyr Tyr Phe
1 5 10

<210> 5183

<211> 10

<212> PRT

<213> Homo sapiens

<400> 5183

Thr Ala Ile Gly Arg Thr Cys Ile Thr Asp Leu Gln Leu Thr Val Gly
195 200 205

Gly Pro Xaa Pro Ala Ala Pro Leu Leu Arg Gly Ala Xaa Cys Asp Cys
210 215 220

Ser Gly Pro Ile Ser Pro Ser Leu Xaa Gly Val Ala Xaa Arg Gln Pro
225 230 235 240

Trp Ala Pro Ser Trp Pro Gly Ser Tyr Ala Phe Ile Met Ser Leu Asn
245 250 255

Lys Arg His Ser Ser Gly Asp Gly Asn Ser Lys Leu Lys Xaa Glu
260 265 270

<210> 5188
<211> 38
<212> PRT
<213> Homo sapiens

<400> 5188
Met Leu Gly Ile Ala Thr Val Phe Phe Phe Gly Leu Gly Leu Glu Val
1 5 10 15

Val Gly Lys Asn Ala Cys Gln Pro Ala Leu His Leu Gly Leu Gly Ala
20 25 30

Cys Gln Leu Pro Ala Leu
35

<210> 5189
<211> 18
<212> PRT
<213> Homo sapiens

<400> 5189
Met Gly Asp Leu Lys Leu Val Leu Leu Ile Ser Glu Leu Ile Ile Glu
1 5 10 15

Phe Pro

<210> 5190
<211> 31
<212> PRT
<213> Homo sapiens

<400> 5190
Met Pro Arg Ser Phe Leu Ser Thr Phe Leu Phe Phe Gly Thr Val Arg
1 5 10 15

Gly Phe Thr Leu Ser Ser Trp Thr Ser Leu Pro Gln Ser Trp Asn
20 25 30

<210> 5191
 <211> 37
 <212> PRT
 <213> Homo sapiens

<400> 5191
 Leu Pro Phe Leu Ser Leu Cys Cys Ala Met Ser Ser Ser Ser Pro Leu
 1 5 10 15
 Val Leu Gly Ala Trp Gln Glu Val Ala Ala Ile Gly Cys Phe Leu Asn
 20 25 30
 Glu Gly Ala Asn Gln
 35

<210> 5192
 <211> 68
 <212> PRT
 <213> Homo sapiens

<400> 5192
 Met Asp Ser Ala Leu Ala Leu Cys Val Thr Leu Gly Ser Ser Val Pro
 1 5 10 15
 Leu Ser Val Leu Pro Gln Phe Pro Ser Leu Tyr Asn Val Ala Gly Glu
 20 25 30
 Gly Glu Asp Gly Thr Arg Leu Asp His Val Ala Ser Glu Val Pro Ser
 35 40 45
 Arg Ser Asn Tyr Arg Ser Lys Ser Pro Arg Lys Gln Val Ser Lys Ala
 50 55 60
 Leu Lys Phe Leu
 65

<210> 5193
 <211> 50
 <212> PRT
 <213> Homo sapiens

<400> 5193
 Met Val Gly Glu Thr Cys Leu Leu Phe His Leu Gly Val Thr Cys Ser
 1 5 10 15
 Leu Ala Trp Arg Arg Arg Glu Lys Thr Glu Lys Gly Val Ile Pro Asn
 20 25 30
 Ile Cys Ile Ala Gln Ser His Thr Arg Asp Leu Ile Ser Leu Ala Ile
 35 40 45
 Leu Cys
 50

<210> 5194
 <211> 22
 <212> PRT
 <213> Homo sapiens

<400> 5194
 Met Val Met Val Val Val Met Met Ala Val Val Leu Tyr Phe Cys Ala
 1 5 10 15
 Pro Ser Gly Pro Ser His
 20

<210> 5195
 <211> 59
 <212> PRT
 <213> Homo sapiens

<400> 5195
 Met Gly Leu Ser Val Leu Leu Pro Leu Cys Leu Leu Gly Pro Gly Arg
 1 5 10 15
 Phe Thr Ser Gly Gln Lys Pro Leu Asp Thr Pro Gly Leu Gly Ala Ala
 20 25 30
 Val Leu Ser Val Arg Lys Ala Gly Leu Lys Met Arg Ser His Leu Thr
 35 40 45
 Pro Ser Val Cys Thr Val Pro Ser Pro Gly Ser
 50 55

<210> 5196
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 5196
 Ala Thr Ala Leu Pro Ser Met Ser Ser Thr Phe Trp Ala Phe Met Ile
 1 5 10 15
 Leu Ala Ser Leu Leu Ile Ala Tyr Cys Ser Gln Leu Ala Ala Gly Thr
 20 25 30
 Cys Glu Ile Val Thr Leu Asp Arg Asp Ser Ser Gln Pro Arg Arg Thr
 35 40 45
 Ile Ala Arg Gln Thr Ala Arg Cys Ala Cys Arg Lys Gly Gln Ile Ala
 50 55 60
 Gly Thr Thr Arg Ala Arg Pro Ala Cys Val Asp Ala Arg Ile Ile Lys
 65 70 75 80
 Thr Lys Gln Trp Cys Asp Met Leu Pro Cys Leu Glu Gly Glu Gly Cys
 85 90 95
 Asp Leu Leu Ile Asn Arg Ser Gly Trp Thr Cys Thr Gln Pro Gly Gly
 100 105 110

Arg Ile Lys Thr Thr Thr Val Ser
115 120

<210> 5197
<211> 101
<212> PRT
<213> Homo sapiens

<400> 5197
Val Gln Thr Leu Pro Leu His Pro Pro Gly Leu Pro Ser Ser Ala Ser
1 5 10 15
Ser Val Ser Lys Met Glu Pro Pro His Leu Arg Ser Thr Arg Leu Thr
20 25 30
Arg Thr His Ala Pro Pro Ser Ala Leu Ile Lys Pro Thr Asp Pro Asp
35 40 45
Ser Leu Ser Ala Thr Pro Gly Trp Ser Gly Pro Arg Cys Gly Ser Ala
50 55 60
Leu Ser Thr Pro Arg Ala Pro Arg Pro Ser Glu Gly Ala Pro Ala Gly
65 70 75 80
Ala Ser Asp Thr Leu Gln Phe Arg Ala Val Gly Gly Leu Gly His Ile
85 90 95
Pro Val Pro Trp Leu
100

<210> 5198
<211> 32
<212> PRT
<213> Homo sapiens

<400> 5198
Met Leu Ala Ala Val Gly Arg Pro Lys Pro Arg Ser Pro Leu Ser Ser
1 5 10 15
Leu Ser Thr Leu Gln Leu Tyr Leu Phe Cys Ser Ser Thr Arg Arg Ser
20 25 30

<210> 5199
<211> 282
<212> PRT
<213> Homo sapiens

<400> 5199
Met Ala Ser Leu Gly Gln Ile Leu Phe Trp Ser Ile Ile Ser Ile Ile
1 5 10 15

20					25					30						
Glu	Ala	Glu	Ala	Phe	Ala	Leu	Tyr	His	Lys	Ala	Leu	Asp	Leu	Gln	Lys	
35					40					45						
His	Asp	Arg	Phe	Glu	Glu	Ser	Ala	Lys	Ala	Tyr	His	Glu	Leu	Leu	Glu	
50					55					60						
Ala	Ser	Leu	Leu	Arg	Glu	Ala	Val	Ser	Ser	Gly	Asp	Glu	Lys	Glu	Gly	
65					70					75					80	
Leu	Lys	His	Pro	Gly	Leu	Ile	Leu	Lys	Tyr	Ser	Thr	Tyr	Lys	Asn	Leu	
85					90					95						
Ala	Gln	Leu	Ala	Ala	Gln	Arg	Glu	Asp	Leu	Glu	Thr	Ala	Met	Glu	Phe	
100					105					110						
Tyr	Leu	Glu	Ala	Val	Met	Leu	Asp	Ser	Thr	Asp	Val	Asn	Leu	Trp	Tyr	
115					120					125						
Lys	Ile	Gly	His	Val	Ala	Leu	Arg	Leu	Ile	Arg	Ile	Pro	Leu	Ala	Arg	
130					135					140						
His	Ala	Phe	Glu	Glu	Gly	Leu	Arg	Cys	Asn	Pro	Asp	His	Trp	Pro	Cys	
145					150					155					160	
Leu	Asp	Asn	Leu	Ile	Thr	Val	Leu	Tyr	Thr	Leu	Ser	Asp	Tyr	Thr	Thr	
165					170					175						
Cys	Leu	Tyr	Phe	Ile	Cys	Lys	Ala	Leu	Glu	Lys	Asp	Cys	Arg	Tyr	Ser	
180					185					190						
Lys	Gly	Leu	Val	Leu	Lys	Glu	Lys	Ile	Phe	Glu	Glu	Gln	Pro	Cys	Leu	
195					200					205						
Arg	Lys	Asp	Ser	Leu	Arg	Met	Phe	Leu	Lys	Cys	Asp	Met	Ser	Ile	His	
210					215					220						
Asp	Val	Ser	Val	Ser	Ala	Ala	Glu	Thr	Gln	Ala	Ile	Val	Asp	Glu	Ala	
225					230					235					240	
Leu	Gly	Leu	Arg	Lys	Lys	Arg	Gln	Ala	Leu	Ile	Val	Arg	Glu	Lys	Glu	
245					250					255						
Pro	Asp	Leu	Lys	Leu	Val	Gln	Pro	His	Ser	Phe	Leu	Ser	Ser	Pro	Gly	
260					265					270						
Ser	Ala	Ser	Glu	Arg	Ala	Cys	Trp	Pro	Cys	Thr	Ile	Ile	Ser	Pro	Pro	
275					280					285						
Val	Ser	Pro	His	Val	Pro	Ala	Leu	Ala	Lys	Gly	Leu	Ile	Cys	Arg	Thr	
290					295					300						
Thr	Arg	Thr	Pro	Ala	Ser	Leu	Leu	Ser	Pro	Pro	Trp	Trp				
305					310					315						

<210> 5202
 <211> 18
 <212> PRT

<213> Homo sapiens

<400> 5202

Met Gly Gln Ser Val Asn His Leu Arg Val Ser Glu Tyr Ser Gln Phe
1 5 10 15

Ser Leu

<210> 5203

<211> 379

<212> PRT

<213> Homo sapiens

<400> 5203

Met Gly Tyr Ala Arg Lys Val Gly Trp Val Thr Ala Gly Leu Val Ile
1 5 10 15

Gly Ala Gly Ala Cys Tyr Cys Ile Tyr Arg Leu Thr Arg Gly Arg Lys
20 25 30

Gln Asn Lys Glu Lys Met Ala Glu Gly Gly Ser Gly Asp Val Asp Asp
35 40 45

Ala Gly Asp Cys Ser Gly Ala Arg Tyr Asn Asp Trp Ser Asp Asp Asp
50 55 60

Asp Asp Ser Asn Glu Ser Lys Ser Ile Val Trp Tyr Pro Pro Trp Ala
65 70 75 80

Arg Ile Gly Thr Glu Ala Gly Thr Arg Ala Arg Ala Arg Ala Arg Ala
85 90 95

Arg Ala Thr Arg Ala Arg Arg Ala Val Gln Lys Arg Ala Ser Pro Asn
100 105 110

Ser Asp Asp Thr Val Leu Ser Pro Gln Glu Leu Gln Lys Val Leu Cys
115 120 125

Leu Val Glu Met Ser Glu Lys Pro Tyr Ile Leu Glu Ala Ala Leu Ile
130 135 140

Ala Leu Gly Asn Asn Ala Ala Tyr Ala Phe Asn Arg Asp Ile Ile Arg
145 150 155 160

Asp Leu Gly Gly Leu Pro Ile Val Ala Lys Ile Leu Asn Thr Arg Asp
165 170 175

Pro Ile Val Lys Glu Lys Ala Leu Ile Val Leu Asn Asn Leu Ser Val
180 185 190

Asn Ala Glu Asn Gln Arg Arg Leu Lys Val Tyr Met Asn Gln Val Cys
195 200 205

Asp Asp Thr Ile Thr Ser Arg Leu Asn Ser Ser Val Gln Leu Ala Gly
210 215 220

Leu Arg Leu Leu Thr Asn Met Thr Val Thr Asn Glu Tyr Gln His Met
225 230 235 240

Leu Ala Asn Ser Ile Ser Asp Phe Phe Arg Leu Phe Ser Ala Gly Asn
245 250 255

Glu Glu Thr Lys Leu Gln Val Leu Lys Leu Leu Leu Asn Leu Ala Glu
260 265 270

Asn Pro Ala Met Thr Arg Glu Leu Leu Arg Ala Gln Val Pro Ser Ser
275 280 285

Leu Gly Ser Leu Phe Asn Lys Lys Glu Asn Lys Glu Val Ile Leu Lys
290 295 300

Leu Leu Val Ile Phe Glu Asn Ile Asn Asp Asn Phe Lys Trp Glu Glu
305 310 315 320

Asn Glu Pro Thr Gln Asn Gln Phe Gly Glu Gly Ser Leu Phe Phe Phe
325 330 335

Leu Lys Glu Phe Gln Val Cys Ala Asp Lys Val Leu Gly Ile Glu Ser
340 345 350

His His Asp Phe Leu Val Lys Val Lys Val Gly Lys Phe Met Ala Lys
355 360 365

Leu Ala Glu His Met Phe Pro Lys Ser Gln Glu
370 375

<210> 5204
<211> 9
<212> PRT
<213> Homo sapiens

<400> 5204
Met Val Leu Ser Pro Leu Phe Ser Ala
1 5

<210> 5205
<211> 10172
<212> DNA
<213> Homo sapiens

<400> 5205
ggcatctcct taatggctcc ctagtgggatg gagagcctcc catgaagagg aggcgggggaa 60
ggaggaaaaa tgtggaggga cttgatctgc ttttcatgag ccacaaacgg acgtcattga 120
gtgcagtaag ttggggagct tgccctgcac gcgattgcac gtgttgacag ctgagggtcc 180
tgtgatgctc acgatgctgg gctgtgtttc tctcagcagc attgtatgaa agccagcttc 240
ctccactaaa gaaatagttt tacaataaac agtcatgatt ctgatcattg atacagatca 300
cttggcctga acgaagtgtg gcttgaggat gtattcttcc caagttctga tgtgttgatt 360
gctctcagaa gaacagccaa acctagaaac atgttcttct gaatctagaa ttgttatctc 420
tgaattcttg aggtggaaca agtttctattg atatgtttta ggcctggcat ttattaaaat 480
tagtataaat gtttcatttt ggacctaaaga tttgggttaa cataaaaagc tagtgactgc 540
aaattctcct atctccttaa gtagatattt taaaaatttg agctgtgctt ttgctagaat 600
aggttttgaat agaatgtgtg aaccaatgga ttttgacttt tccttttctca gttcagagga 660
aataaattaa tgcagtataa tcaaaatgat tttctttctt aatctgcttc aactacatct 720
cacccaaaaa tgtggtgcct gactcactga tgaccagaat tttatcccaa agagcacaat 780
tacatgtgct tttttaaaaa atgggttagc actatatatc ttgaacctat tgaccagaag 840

ccccagtcac	catagtggct	ggaactcctt	gtctgtgttg	tgaggagtgg	gtgctccagg	900
aagccttcca	ggtactgggc	catcctggac	ccttcttcaa	gcagtgggac	acagtttggg	960
aaactgaaaa	ttgagattga	gggaagacag	ttgtctgttt	caacatgttt	ttacttacac	1020
catccctatt	attatttggc	cattttctat	ttcttgaact	cagagaaaagc	ttaataagat	1080
ggcaggaaaa	gacatgggtt	agttaaagtt	cagaaatgaa	aaataacatc	cactgaaatt	1140
tctttgccct	ctggtggggg	ctaattaaaa	cagaagcatt	caggtggcta	agagtaaatt	1200
ttcaaaaatt	ggccggggcat	ggtggctcac	gcctgtaatc	ccagcactct	gggaggccaa	1260
ggcaggtgga	tcacttgagg	tcagcagttc	aagaccagcc	tggccaacat	ggcaaaacct	1320
tttctttact	acaattataa	aaatttagcct	ggtctggtag	cacgtgtctg	tgatcccagc	1380
tactcaggat	gctgaggcag	gagaattgct	tgaacccagg	aggcgggagt	tgcagtgaat	1440
cgagattgca	tcactgcact	ccagcctggg	tgacagagt	agactctgtc	tcaaaaaaat	1500
aaagaaaatt	tttttcaaaa	ttgattacca	atgcagtgat	catcataatg	gtcatatttg	1560
ttgatgggat	gattgttttc	agaatcctgt	aaaagtacac	tttgtaatgg	actagctgtg	1620
acttacatgt	tttctgtaag	ttaaaatgcc	atttctaggg	gtatggccct	caaacagagt	1680
tgtagcacta	gtaaatagcc	ttcctgtttg	aaactacttc	tttgatagat	tttgttgact	1740
gataaattct	ttctccataa	actttaacaa	attgggaagt	ttctgcagct	gacacttctt	1800
tttgtttatt	atcatgttca	atattttag	gtttttttgt	ttttgaaaca	gggtttgttt	1860
ttgagacagg	gtctcactct	ttcgccagg	ctggagcaca	atggcgcagt	ctcggctcag	1920
tgcagcctcc	aacttctggg	ctcaattgat	tctcccacct	cagcctccct	agtagatggg	1980
actacaggcg	tgcaccacca	tacctggcta	attgttttgt	atttttgggt	gggacggggg	2040
ttcaccatgt	tgcccaggct	ggtctcaaac	ttctgggctc	aagtaatcca	cccacctcag	2100
cctcctgaag	tactgggatt	acaggcaatc	atgttcagta	tttggatcac	gacacagctt	2160
tgtctctgga	tcagggtgta	ggaattaata	atgcaacaca	cgtgcttttt	tcctattgca	2220
agtacacatt	ctatttttaa	tctgagactg	attttattca	tttactatt	ttaagccgtt	2280
gttaagaatt	tggtgatatt	tttctttttt	taaagtccca	tttagaaaagc	ctgagagaat	2340
tcctaattga	agttagagaa	tgtattttta	aaactttttt	tttttaactg	tcacattttg	2400
aaatgtaggg	attcctcatt	tgggtgtgtc	gggggtgatg	tgcattgcaca	taaaatacaa	2460
ggaaagcact	gctcgatctg	taaaataaacc	aagtaggaaa	agatgtaaag	gccagcagt	2520
ttacctggat	gaaagaggac	agatcctaga	atttagtatt	ttgtcagcac	tctaactgtg	2580
ctgccatgaa	aaagtaagag	tgcatcagc	aacagtggac	aagctggcac	tattccctgt	2640
gccagcactg	agagtcaaaa	aatacagtcc	tgacaagtgc	ttgcactgga	gaatgcagt	2700
tttaggatgg	ggtagcacat	aaatcataat	gtgtcctggg	tgttcatgtg	tgccacgacc	2760
aagggatgtc	taggggtactt	tgtgagccca	aaggaagcct	gggagtggag	ggaagaggat	2820
atggggagaa	acagatgaag	aagtttccct	atggatggct	gtacttcaat	taagttttga	2880
agatcatgta	gtagttgggt	attttaaaag	ggttggcaga	gaacatgtgt	aagaggagag	2940
agcctcttgg	gtttgaagaa	ctgaggaatt	tgctgaggaa	gtgagcttca	gcagagatga	3000
gcttgcagag	aaggcaggat	gcaaatacat	gagggccttg	atgccattcg	gaagaacttg	3060
gattttgtcc	tggagttaat	agggatgcaa	ttattgaaaa	aaataggaga	gtgatgtgac	3120
ataatttttt	gaactgggaa	gggctgcatt	ttagaaaact	gactccagcg	tagtgggtgtg	3180
gagggttgat	tgaagatagg	tgggattaga	atcagggaga	ccatttagga	atattgcaat	3240
aacctgggtg	ggaagtgaca	aaagcctggg	ccatggtaga	gctgtgggga	aggagaaatg	3300
ggtgtctgga	ggttgaaata	actgtagact	tcagttagt	gtggtctttc	caatgttgcc	3360
acacatgtct	gagacaaagt	gtcccactac	caacaaaatt	atattgtgca	cagagtggcc	3420
ataagttaca	tatagactgg	cttttagaaa	ttcctttagt	ataaattatc	tttaatatca	3480
ttatccgggg	atctccaaga	gagactgaga	ggccgccttt	catgcataat	agctcagact	3540
atacccccca	tgttgtattc	ccagtggctg	gcttaggatt	tcagagcatg	gaaccttagt	3600
ggactataaa	ttttttacct	aattactagt	tctacagtgt	gaagaatgat	ataaaagt	3660
cgtcttcttc	tttttatttt	tatttttttg	agacgaagtc	tcactctgtt	gcctaggctg	3720
gagtgcagt	gcacagtctc	tgctcactgc	aacctctacc	tcctgatttc	aagtgattct	3780
cctgccccag	cctcccagg	agctgggatt	acaggcaagt	gccaccatgc	ctggctaatt	3840
tttgtatttt	ttgtaaaagt	ggggtttcac	catgttggcc	aggctgggtc	tgaactcctg	3900
acctcagggt	atccggccac	ctcggcctcc	cagagtgcgt	ggattacagg	cgtgagccac	3960
cgtagccagc	ctcattttct	gacttttaat	agctgttccc	aaacaactag	acattgtttc	4020
tagtaactat	tttctctttt	tgataaaaaga	tccattctag	gatagcgttt	tcttgaaata	4080
ggacattgtc	agaggctctc	tcttcgtgtg	agaattcata	ccattgtgaa	ctttctgcag	4140
gaggatgctg	aggtgaccaa	agcttttgaa	gaagatatag	agaccccacc	aacaagaaac	4200
attccttctc	ccggacagct	ggacccagac	acacggatcc	ctgttatcaa	tcttgaagat	4260
gggactaggc	tgggtggggga	agatgctcct	aaaaataagg	atthagttga	atggctgaag	4320
ctgcacccta	cttacactgt	tgatatgcca	agttatgtac	cagtgaagt	tgacagattt	4380
agagttggaa	ggaatcttgc	aggccgggtc	acttcattcc	cttacaacat	agaaatccct	4440
gacagctggg	ccctctgcct	tttccttgaa	tgtttccctg	tctcaaacat	ttcccaggtc	4500

tttgttgttg	aatcttcttc	attacagata	ctagcttcag	gtctgtctta	ctgaaggcag	4560
ccttacagtt	atgtgaagat	gcgcgttatg	catttcctta	ctgtttgctt	ctcccatcaa	4620
actcatgtga	cttcttcagt	tattctttcc	atggcatcgt	ttccaggcag	tcttagtatt	4680
ggggtaacac	tggtgaatgc	actttctcca	gtctccagac	gaggccccgc	catcccagag	4740
tgctatgaag	ccaattactt	ccagagattt	gaccagttag	tgacagccaa	gattgtatta	4800
gctgctttta	tggaactaa	tcctgggtgcc	ttatattaaa	cgtagacag	ttcatatctc	4860
caaatgggtt	gtcacacgaa	ctgtttgcta	gctagcaatg	caagtctttt	gctttctgta	4920
tttatgtgat	tgatttttta	aaacttaaat	gtagagtttt	acatttttatt	ttgttgggtt	4980
cagcctagag	ttcttgccac	tcagaaagta	ccccacccc	ctacaagatc	tgtctgtttg	5040
ttgggttagtt	ctcattacag	acagtctcat	gttgttgatg	gggtatcatc	tctgtgttca	5100
ttggagccac	taactagaaa	ttagtaaaag	tactacagaa	agcctccttt	aaaagtatca	5160
tgacttggtt	aaacatttaa	agaaaaactt	taagtgaggt	tattgataga	taaaaggaaa	5220
agccaattct	cacttatgta	ttccttaaat	gacgggtaaa	ataggagttt	tttctttcaa	5280
agagaaaaat	atggtttcta	atattaataa	ttaaaatgat	tcttgaaact	tccataataa	5340
ttgaagatga	tctgacagtt	ctctttggca	tttatataga	gaagaataag	tactaaatac	5400
caattttact	aaatatgttt	tttcttttgc	agaagaatgc	agatgtgctg	tttctctcat	5460
ttcagaaacc	gaacacagaaa	cgacatagat	gtcgaaaccc	taataaattg	gatataaaca	5520
ctttgacagg	agaagaaagg	gtgcctgttg	tcaataaacg	aaatgggaag	aaggtaaacg	5580
ctgggaaagg	gaattgatca	ctatgcgatt	tcttagccca	gaaggaagtg	ttttatcctg	5640
ccttcttcta	taggggaaaa	gaatcctgtc	tgcccgaatg	cggtgtgtgcg	tgtatgtgtg	5700
tattatagaa	gggggaggga	gtagattaac	agaaagggga	gggaagactg	tgtttttaat	5760
cattttgtcaa	atgcctctac	ccagatgggt	ggagctatgg	cgctctcaat	gaaggatcta	5820
cccagggtggc	tggaagaaaa	tcctgaattt	gcagttgtct	cagactggac	tgatatagtt	5880
aagcagtcctg	taagtacaaa	ctgcatttct	atcaagaaag	gtagctatac	aaaactgttt	5940
tccttagtct	ttcttatttt	ctgttggcca	ttaattattc	agttgtaact	tagcttaaaa	6000
gaattgacat	aatacatcat	tttcatacat	catttcatac	atcattaata	catcaatcat	6060
taatccaaag	tgaattcatt	tatcagctcc	aattttaaag	gtttgtatgg	aaacatacat	6120
tcacaatctt	agaggtagac	ttctccaggg	gggattgccc	cagctaagcc	tacttaacag	6180
ctcacctgtg	gaataggatg	tatggtgggt	gagatcatta	agattaactg	tgatttctga	6240
tttaaaaaaca	aaacaaaaaca	aaacaaaaaca	aaaatacaac	agttctgcct	aaaagatttg	6300
ttaccatttag	cttttttaaaa	attcgttcat	gacatgctgg	ttctttgttt	taattataca	6360
ttaaaaatgt	ctttcggtgt	aacattctgt	tgatcttaac	acacgtgtga	gtttgtgaac	6420
tgacaccgta	gtcagaatag	ggttccatcc	cccaccccca	ccaccccgag	ttccctcaca	6480
ccgtcctttc	cccgacccca	gcccctgggt	gccgtgacc	tggtgtccat	ccctgtcttt	6540
ttgagaatgt	cctgaaatgg	aagcatgaag	gacataagtc	ttgaagcagt	ttctttcgct	6600
catcatatgg	aaggctcatcg	atggtcacat	gtgtcacagt	tatctccttt	ctgttgccaa	6660
gtagctgtct	ccattgcata	gatgtgacac	tgacaggctt	agccctcaca	cactgaagga	6720
catctgggtt	atttcttgat	ttttgaaact	atgattagag	ctgctataag	caattgtgta	6780
cagggttttg	tgtgaacata	agttttcatt	tttctagggt	agatactaaa	atataattac	6840
attttccata	tttcaaaaat	actttttacat	atatttgaaa	tatccaaaat	aacacattat	6900
agagggcata	aaacatcctg	ggtttatatt	atgtttatct	atttttataat	ttttctccca	6960
tacaatatct	ttttttttct	tttttttttt	tttttttttg	acaaggtgtt	tgtaacccag	7020
gctggagatgc	agtggtgaaa	tcacagctca	ctacagcttc	attctcctag	gctcaaggcaa	7080
tcctcccacc	tcagcctccc	aagcagctgg	cactacaggc	acacatcacc	aagcttggtt	7140
agttttttgta	ttttttgtag	agaaggcatt	ttgccacgtt	gcccaggctg	gtctcaaact	7200
cacctcaagc	aatctgcctg	ccctgacctc	ccaaagtgtc	gagattacag	gtgtgagcca	7260
ctgtgcccag	ccaaaatttt	tttttaattg	acagatattt	aattgacaaa	aattaattga	7320
tgaatcaaat	atatatgcaa	ggtgtacagc	acagtgtttt	tttcttttaa	gagacagggt	7380
cttgtctgtt	caccaggtct	ggagtgcatt	ggtgcaatca	tagctcactg	cagcctcaaa	7440
ctcctgggtc	caagcagttc	tcccacctca	gctctctgat	tagccaagta	gctgggatga	7500
caagcatatg	ccaccacacc	tgataatttt	ttttttattt	tgtagagata	gggtcttgct	7560
atgtgcccc	ggctggcttc	agactcctgg	gctcaagaaa	tcctctagtc	ttggcctccc	7620
aaagtgttgg	gattacaagc	atgaaccacg	gcacctggct	tcaaagtgat	gatttgatat	7680
aattatacat	tatgtacttt	ccttttttaa	aatttgttat	gggtacatag	taggtgtata	7740
tatagggtac	atgagatatt	ttgtacaagc	acacagtgc	taatgatcat	gttgggtaga	7800
tgagggtatgc	atcacctcaa	gcatttaccc	tttgtatttc	aaacaatgtg	attatactct	7860
tttagttatt	ttaaaatata	cagtaaatta	ttgttgactg	tgtagtcacc	ctgttgtgtt	7920
atcaaaaact	agatcttact	catcctgtct	aactctattt	ttgtacccca	taatgtactt	7980
tctgatgtat	gatttgttga	gttagttatg	gatgcagcta	acttgacatt	tacctactg	8040
atgagtagcc	ttgagcaatt	tttgtgcagt	tcagcaagct	aacataataa	taaaacaag	8100
ttttgctgtc	attaagtttt	atcattgagc	tgtaggagg	gaagaactac	ttaggtattt	8160

ccatttggaa	tggcaggttc	accacagagg	ctcacattga	gatcaagttg	tcttcgacag	8220
cctttatagc	cactgtttgc	ctcccctgta	ctccagggtt	ttgttcctga	gtcgatgttt	8280
gaccgccttc	tactggggcc	tgtagtgcgg	ggagagggag	cgagcagaag	aggaagaagg	8340
cccttaagtg	agatcgccag	agcagccgcg	gccgccgctg	ctgtggcctc	cacgtcaggg	8400
atcaaccctt	tgctgggtgaa	cagcctgttt	gctggaatgg	acctgacaag	ccttcagaat	8460
ctccagaatc	tccagtcgct	ccagctggca	ggcctcatgg	gcttccctcc	aggactggca	8520
acagttgcca	ccgccggagg	cgatgcaa	aaccctgctg	ctgtgctgcc	cctgatgctg	8580
ccaggaatgg	cgggcctgcc	caacgtgttt	ggcttgggcg	ggctgttgaa	taaccctctg	8640
tcagctgcta	ctggaaacac	cactactgct	tctagtcaag	gagaaccgga	agacagcact	8700
tcaaaaggag	aggagaaagg	aaatgagaat	gaagacgaga	acaaagactc	tgagaaaagc	8760
acagatgctg	tttcggctgc	tgactctgcg	aatggatctg	ttgggtgctg	tactgcccgg	8820
gctggattgc	cctcaaacc	gctagccttc	aaccctttcc	tctgtccac	aatggccccg	8880
ggcctcttct	acccatccat	gtttctacct	ccaggactgg	ggggattgac	gctgcctggg	8940
ttcccagcat	tggcaggact	tcagaatgcc	gtgggctcca	gcgaagaaaa	ggctgctgac	9000
aaggctgagg	gaggaccctt	taaagatgga	gagacccttg	aaggcagcga	tgccgaggag	9060
agcctggata	agactgcaga	gtcctccctc	ttagaagacg	aaatagcaca	gggtgaagag	9120
ctagactcac	ttgatggggg	ggatgaaata	gaaaacaatg	aaaatgatga	ataaccagta	9180
ccagttccag	ttcaagtgtt	taaaactttt	gacaagtggg	agtcctactg	tttactactca	9240
cagttaatgt	tcatacctag	ttttataagc	tgttctgtaa	catagtgtag	caaaaaaaaa	9300
agttcaagtc	atgttatata	ggtgtgtcaa	aaggatctct	ggtcattaag	tattgtgcag	9360
tgcattatct	attatcccta	ggagagatga	aatttgagag	gtgatcatgt	ctttttaagg	9420
aaacttacat	aatgctctgc	tttttttttt	tctcttggtg	ccattgggtat	tataataaag	9480
agcaatttgt	aactgagtgg	cactaatgga	agaaagtgtc	gctcaaagga	agtatgaagt	9540
tatatatttt	attttttaat	tttaattttt	aatttttttg	ctgtgaaggt	caagctgaaa	9600
tttaccatac	atatcatact	tgctcatttg	tttccctttt	tgactgtatg	gggggtccca	9660
cactcgtgca	tacacacaca	tccatacact	ctgacaatct	ccacgctagt	gtgaacgcct	9720
ctgtcccag	gcgcagcaat	aataaggcag	ctgttgaatg	tgaaggggtc	ctttggaaaa	9780
tttaacctact	gggaggggtt	ttgccagaca	gaactacagt	tccattgtct	cgtgggtctg	9840
taatgcactg	gtaaaaacaa	aataaataga	tgaataaata	aagagtgaga	gaagagagaa	9900
tcaggtacct	tttttaaat	aaaggacttt	gttacttttag	ccacaaagct	aaaacagcat	9960
tacctcagct	ctaaactagc	cttgaagttt	acagacatga	ctttgtaaat	gtattgtttt	10020
tctttgttgt	gatgtccttt	tatttttttt	ttttgaaact	gctttccatg	taagataaaa	10080
tgtaaatgcc	tgccaactgt	agtaatgatg	ctttaaaaaa	aagtgaccca	tgatatgcag	10140
agaatgtaat	tatagaatgt	agtatatagg	ga			10172

<210> 5206
 <211> 986
 <212> DNA
 <213> Homo sapiens

<400> 5206						
actcaactgt	tttgaagact	agacagtaag	gaaaaccttg	aattactctc	acataattcc	60
actccagata	tctcaacagc	aatgcataca	aaaagctcct	attactccct	caaaagggca	120
tctgagaccg	agaatactta	gaaatgtgtg	cagcgtgtga	taatgtggta	cactgaagaa	180
caaaagggca	aaagaaaaat	gaggctttta	caggcacaat	atctaggtca	tttatccttg	240
gttaatgggt	agaaaaacac	aatgcggtag	tgtcagcaag	ggacacaaag	gcactctggt	300
gtcctgcaga	ccagcgtctg	atgccagaaa	ccagggtgtg	gaaaaaccca	tgtggaattg	360
aaacagaccc	acttaagcac	gcacgcgcgc	acgcacggtc	tcaggagcta	ctgatttgtg	420
gacccctttt	tgaccttttg	tatttaaagt	aaaatataat	ttgagatcta	ctgttttcac	480
ctttttatgt	cacctgaacc	aacacaaagc	catatttcca	tccagttaaa	aagcagggga	540
agggatgtgg	acgagagtgt	ttcgtgtgtg	ttgccttcc	ccacaccctt	ccccaggac	600
gtccgcacac	agtcaccccc	cagccagtgt	gctgccagac	aggtgggtcta	aattcctccc	660
agactgtgag	attcagttcg	tttatgtctc	aagatgaaaa	tatgccctt	aatgattctg	720
ggaaagaaac	aacctgaacc	ctccacctta	cagatcctgt	gattgctttt	atttatcatc	780
gtcgttgtct	gctgaaagtg	aatggggccgt	gcacactgga	ggaaagtgcc	ttgaagagaa	840
tattttttga	aaggggaatta	tttgaacacg	ggaaagtgaa	actaggtctg	catgaagtat	900
aggaaattta	agtattttaag	taacaaagat	gtttagcaggg	agaatttgct	taataaaatg	960
agtcattaaa	gggtgttttt	tttaaa				986

```
<210> 5207
<211> 8173
<212> DNA
<213> Homo sapiens
```

<400>	5207						
tgcgtgtccg	catgctgtac	tacctaagac	aagaagtgat	aggagaccag	gcggataaga		60
tcttagaggg	tgctgactca	aggttagtgc	gagctcacat	ttgttctcaa	cctcagttag		120
ataatctggg	tagccggaaa	acatcatgga	ttgtgtttca	gaaccttcat	aaaccactag		180
taaccctatct	cctttttttgc	atcttgaatg	cagtatttgt	ccttcgtgct	tggggatgtg		240
atgagaatca	ggaaaaggct	gtttgcattt	atgtttgttag	tgtaaagaga	tgtgaactaa		300
agcactgggtg	ttctgagatg	acccttaaaa	tgggatacca	tgtgataaag	ttcattttctg		360
gtcatggcag	agggctactg	actcatgccc	ttctttttaa	ccttgctgat	acctcccac		420
catgctcaga	tgtttatcgt	gggagagagg	gcactgtgagc	tatgtatcac	attcattact		480
tggaaattcct	ttttaatact	aatattttctt	ataaatgttg	tctttcagtg	aagccgatgt		540
gtggatccct	gaacctttcc	atgctgaagt	tcctgcagat	tggtggggata	aggaagcaga		600
caaatccctc	ttaattggag	tgttcaaaca	tggaagtga	cgtttctgtt	tgaatacatc		660
tcaactgtat	ggcttgggtct	ttatttagaa	ctctttacat	actcttttcc	aaagtcataa		720
tattaatgag	gatagttcca	aaggactcct	ggcgtctacc	atttttctgt	actaaaaatc		780
taatatgaac	tgtaaatatc	agatgctggt	tttgaatggt	tgttgagcat	ttgagaagaa		840
aacattttctt	tcttggctgt	aaataaaaacc	caaaccatat	ttgttttaat	aatagccaag		900
ttgtactata	gctctcccta	aacttttgcct	ccagcgcggc	ttcccttgct	aactctgcc		960
accagtgta	aagtggacgg	tgggcttaac	ctctgctatt	aatctgtaca	agtgcctcct		1020
gggctttgtt	ccaagcaata	tttcacaaat	gtcagtgctg	agaactcgcg	gtccccctga		1080
gtgggatgca	gccttgttaa	ctttgaaagg	ctggggatgc	agaactggca	tgatatatac		1140
agtgagcgat	tcctgattat	aatcccaatt	ctctggaggt	cgcgagggta	ttctcagcag		1200
cccagcctga	ctaaagggga	gaatgatggc	ttataaaacc	tttcatgatt	acagtttggc		1260
ttgcggctct	acagcagtta	ggagcgggtg	gttgtagtac	acatcccta	tgaattgtgc		1320
tgttctgcct	atgtactgca	gccacatttt	gtgagctcag	cctcaaaatc	attttcccgc		1380
agtgcactgt	tgggatctgc	cattttccat	ctagtcaact	tgggcagtca	aaaagcaaat		1440
tgcagtttga	aaaccataga	gggaaccgtg	tcatttctac	gacatgcatc	atccta		1500
taataagaca	ggttcgctgg	ccttatgtat	atggggattt	ttcagccagc	catcgagtt		1560
cctgcaggac	tgatgctatt	cacagatggg	atgggggtgg	actcagtgca	cccctgcaga		1620
ggtcataaag	gaacattgcg	aatccttcta	aatgtcaagc	aaaattagat	ctggggaaaa		1680
atagggtcag	aaatcctccc	aggcatcttg	cagttattct	gaacctgttt	ttctattagt		1740
gtttgtggta	attctgataa	tatccctgaa	gtgtaacttg	gctcccagta	gcttccctag		1800
aaggagcgtt	ccatagaatg	atctactaaa	acaaggcca	cttggtattca	acagagatgc		1860
taaccttgac	tgaaaaacaa	acttggtgtg	tggcagtgct	gtgattttgc	cagtgatggg		1920
gcctttcttt	gtttctgtgt	gttttctgtg	cacggatggg	cacggcacag	gctatgagaa		1980
gtacaacttc	atgcgagctg	accccgcgct	gtgctttctg	gaacgagtcg	gtatgctga		2040
tgccaaggcc	atagctgcgcg	agcaaaaggag	aacagacatg	ctagcagatg	gtgtgtacgg		2100
gtaagaaggga	cattttaaaa	ttgaataaaa	ctttatgtca	gtttcacatc	tattggcagg		2160
gttcagttct	taccctgcag	tacacactgt	attgtgtctg	atttgaagtt	caggagatgt		2220
ttaccagtct	actctattttg	tatgtcgtaa	tgactgttta	aacaatatac	attatcttga		2280
taatctgaaa	cttgttttttc	ttttccaaat	gtcattttcc	gcaatctccc	cagacccctt		2340
ccaccacact	gccatggctg	catgttttaa	atactgatag	agttgctttt	gatgtcaaac		2400
ccataattaa	aagtagcact	gggcagatta	ttactctttc	ctaccacccc	cccttccttc		2460
ttttgcttat	cagtatgatt	caaataaatt	ttgtgtttgt	ttacatagg	ggagaatttg		2520
atagagaaga	tgaagaccca	gaatataaac	caaccagaac	accgttcaaa	gtgaaatag		2580
atgtatgaac	ttgagtatat	tggtctttat	agctccatta	aaatattata	tgcccacata		2640
agacttgta	aacttttatag	ataatgacct	ttcttttaaa	agacaaagaa	aaatgagacc		2700
ccaaattaaa	gtaattctgt	ttcttgcttt	gctttcaagg	aatttgcaaa	ttctccttca		2760
gaggataagg	aagaatccat	ggaaatacat	gccacaggta	aggtcccaga	aaagcttgtg		2820
tagccgagca	gacgtgcact	gagcagtcac	tgttcacgtg	gtagggactg	tcctgcttca		2880
tgacagcagt	gtcttaacac	cttattttct	ctacactgac	ctgtttttgtg	aatcatttta		2940
attcttgtta	atggctgtgt	tttcatgaca	ttgaatttct	tagataggat	aactgtttct		3000
ttgatgataa	ttagctgatt	tatattttac	actaattagt	gaaaaatttt	aagcatctaa		3060
actatagctc	ttgggaatag	agcatagagc	atttgctaag	tattcaccta	aaatattttc		3120
agtttatatta	gaatatattgac	cttttaccga	atataaaatc	attacacaac	aattatgcag		3180
ttattttttta	tactcaagat	gattattgca	catacattag	aggagagtac	cttataagaa		3240
gttttatgctg	taaagtgtgt						

aaaattctat	agggagcatt	ttagtgggtgt	ttctgtgtta	tacattataa	gttgctgaag	5640
tattaaaggt	tgtattttaa	atgtgtatac	tctgactttg	agaaatagtt	tcactcagtt	5700
acccatgtat	ctgggtggtct	agtggctagg	aaaagaaata	atttattttt	ttgaaaggat	5760
gattactcac	ataaacactt	ggatttttgc	ttctgtacca	acatgaaaac	taatgaattc	5820
actgttgcac	ttctcttgta	gggtggtaggc	tatgctttttg	accaggtaga	tgatcattta	5880
cagactccct	accatgaaac	agtctactcc	ttgttggata	cactcagccc	cgcctaccga	5940
gaagcatttg	gaaacgcact	gcttcaaaga	ctggaagcct	tgaaaagaga	tggacagtca	6000
tgactacact	ttttcctttc	agaggggctg	gtgctggtag	agaatggtga	tataaagcct	6060
aaaattcttg	catatggcca	tagaaaatgc	atctttgggt	ttgtgttttt	atcacttgct	6120
tccaacttag	gcttttggct	cagaagatta	ttgaataatg	atttgtctta	gtttctgttt	6180
cagtaaggga	attctgaggg	cgttgctatg	ataccatcat	taagacattc	acatgtcttc	6240
atataatatc	tcttcatttc	aaatccta	cactatttca	tactattaca	gggctttgat	6300
gctgccagca	ctgtctttta	cataggaaat	tctagatttg	cacagtaata	gaggaattag	6360
aagtaccta	ctatacactt	tgattcagcc	tgctaaatca	ggggttcaat	actagcttgg	6420
acaaactttg	tagtaattaa	ttgtaccag	ccttattgga	aacaaattat	caactagttt	6480
cccctgcaca	aattttgaaa	ttcactgctt	cacttaatct	atttatatta	ctaataatgg	6540
attaataaag	atgaattaat	tatatattac	ttaactagta	ttaaatgaaa	aacagggact	6600
gaaatagttc	tgtattccgt	gtttgcaaca	gccagccaac	taagcagagg	ataaaccgtt	6660
agcaaatgaa	tgtaataatt	actcatttcc	aagatatcta	agcacataag	caaatacagg	6720
aacagacttc	attctttttc	ttaacaaaaa	agcatcttca	gtgtgtgatt	taaaagaaag	6780
aagattctgg	tttcttagaa	aacaatattt	tggcctgtgt	tgattcttat	tctgaatgtg	6840
tgtttacata	atgtacagta	tatattcaga	aagtattttt	gcttcaacgt	ttactttcta	6900
tgatgtagtg	ctttgggtatt	cctacagcac	cccaccttcc	ccaacagatg	tacagtgttc	6960
tgtctccatt	cgaaatctac	aatgtaatat	gagtgcattg	tatgggtttg	aaaccaaagg	7020
atgaatgaag	cattcagaga	cttaatat	gaaaaaggaa	tagtcagtat	tttatatttt	7080
attacaggta	ctgatattta	taaattta	aaactgtacc	atgctgctgc	atgttttcaa	7140
gtacatgttg	aacagtaagg	attggggagt	tgttttttaa	tggtcaccta	aagcagctgc	7200
tatagaaatg	ttgaactaaa	attttgcac	tggtcatacc	ttcatgcatt	tatcatttgc	7260
agatattttt	ccatcattat	taaaaaacag	gaacttttag	gctctgaaga	tcagtgtggac	7320
cagagcaaat	taaagttcag	tttgtgtcac	aattcattgc	cagacttcat	tggaatgctt	7380
tgtttgatga	tgtatgttca	ttctcagctt	tattttcaga	tgcttaactg	ggcaacgaag	7440
tctaacttca	ggttgaactt	tctcatgttt	aatctcaggc	taaatgtaaa	tgatatttgt	7500
aaagtttgaa	taaaattctg	tttactcatt	ttgagttagt	atgaaaaaaa	gtgattgtat	7560
gtttaagaat	tgaaattggt	cattttgtga	taaatgatta	attccaaga		7609

<210> 5209
 <211> 7609
 <212> DNA
 <213> Homo sapiens

<400> 5209						
gcagctcggg	gctgattatc	acaactgttt	ggtagacctac	ttcactgacc	tgtgaggatt	60
ccttcccttc	aggtactgga	ttcttgatct	ttctgcatca	tcaaggtcct	aattgcaatg	120
aattacactc	ttgcttaaaa	aaaagcttta	taaatgtaaa	actttctcat	ataaacatct	180
ttttatgtaa	tgatcattat	ttctgacatc	tccaattgaa	gtacttgata	acttaagcaa	240
aattaagatg	tttgatattc	atgatgtcaa	gagattttata	gtagtcattt	ctaaatcttc	300
aaaactatgt	aaaaaagaaa	gggctcattt	tgtatgtata	agaccaaata	taatcttgag	360
cagtatactg	attatttttg	gaataaggta	aaatttggaa	agccaaattt	tttttcttat	420
ataataagtc	aatttgagct	ttcagttacc	caacagattg	ctccagcaat	aattggtaat	480
tttataatta	acttctgttg	tttgtagcga	gtgactaatt	ctgtaaaagt	ctgtgagaga	540
cgagataaag	agtcttttaa	acattattaa	ttgaaatagg	attggaggaa	tacattatac	600
atttgctatg	taagtttttg	aaatagcttt	acatatgtta	ttataaattg	cattcagcaa	660
gtagttctga	cttttgtaat	gtgcaaatga	cattcagctg	taggaactcc	agcttcttaa	720
gatttttgc	gataatttag	agcagtggtc	gcacagcaaa	atcactcagg	agctctgaaa	780
aaaataactc	gtcttcagaa	gatttttgatt	ttgtttttct	gcagtgagga	aatgtatct	840
gtaattttat	aagctcttac	aggtaattct	aatgactagc	ttaaaggatt	ttgaatgtca	900
ctatcttgaa	ggattttgaa	tattacacaa	atagggcata	acttggaat	agcaatggac	960
tgtgcagtg	accagatcgg	tgtccatatt	gtcagaaaaa	aattgagact	ccttctaaaa	1020
atgcatttaa	gagccagggt	tggtggcttg	agcctgtagt	ctcaactact	caggcggctg	1080
aggtagtagg	atggccttag	ctcaggagtt	ctaggctata	gtgcacagtg	atcacacctg	1140

tagggaatgt	acacacttaa	gtcagcaaaa	actaaattaa	ttttgcccta	tattgtgctg	4860
gtgaaccatg	atatacctta	taatcttgtc	aaaaagaaaa	gttgtagctg	tgttcacagg	4920
aaaaaaaaaa	aaagaaaaac	acatggcctg	tcagcctttt	gcctaagatc	aattggagta	4980
tcttttctta	tcagtttaat	atctgttatg	tcctctatct	aaggacaata	tattaaatgg	5040
atttttggag	cagggagata	gaataggctc	ttgctccatt	aacttcacac	atcgacctgg	5100
tattgcaaat	acctccagaa	atagtgtacc	cctaccaaga	aaaaaaaaac	acattaacat	5160
gttcttttat	ctcacagaat	tgagcattta	ttccctgtca	ggtaagaaat	atattagggtg	5220
aaagtggcct	ttcagattac	taataataaa	gctaaacagt	tattaaaact	aataaaactat	5280
taaaccaatt	attaataaac	aattattaaa	attaacaact	aattattaaa	actaaattat	5340
taggaataat	ttttagaatt	gtttataaaa	gaagtgaaaa	ataatgaaaa	aaatatgaac	5400
taatgatata	ttacctatta	tagtacttaa	tatagtggac	cctcaatata	tgtggaatta	5460
aatggggtaa	ataatagatg	catgttttag	aatatgaaaa	tgaaatacca	tttttgtgta	5520
gcttttcaaa	ttctttctct	gcatttcctt	gagcttctaa	gtaaaacctt	ttaaatgttg	5580
aaaattctat	agggagcatt	ttagtgggtg	ttctgtgtta	tacattataa	gttgctgaag	5640
tattaaaggt	tgtattttaa	atgtgtatac	tctgactttg	agaaatagtt	tcactcagtt	5700
acccatgtat	ctgggtggtc	agtggctagg	aaaagaaata	atttattttt	ttgaaaggat	5760
gattactcac	ataaacactt	ggattttgct	ttctgtacca	acatgaaaac	taatgaattc	5820
actgttgcat	ttctcttgta	ggtggtaggc	tatgcttttg	accaggtaga	tgatcattta	5880
cagactccct	accatgaaac	agtctactcc	ttgttggtta	cactcagccc	cgcctaccga	5940
gaagcatttg	gaaacgcact	gcttcaaaga	ctggaagctt	tgaaaagaga	tggaacagtca	6000
tgactacact	ttttcctttc	agaggggctg	gtgctggtac	agaatgttga	tataaagctt	6060
aaaattcttg	catatgggtc	tagaaaatgc	atctttgggt	ttgtgttttt	atcacttgct	6120
tccaacttag	gcttttggtc	cagaagatta	ttgaataatg	atttgtctta	gtttctgttt	6180
cagtaaggga	attctgaggg	cgttgctatg	ataccatcat	taagacattc	acatgtcttc	6240
atataatatc	tcttcatttc	aaatcccta	cactatttca	tactattaca	gggctttgat	6300
gctgccagca	ctgtctttta	cataggaat	tctagatttg	cacagtaata	gaggaattag	6360
aagtacctaa	ctatacactt	tgattcagcc	tgctaaatca	gggggttcaat	actagcttgg	6420
acaaactttg	tagtaattaa	ttgctaccag	ccttattgga	aacaaattat	caactagttt	6480
ccccgcaca	aattttgaaa	ttcactgctt	cacttaatct	atttatatta	ctaataatgg	6540
attaataaag	atgaattaat	tatatattac	ttaactagta	ttaaatgaaa	aacagggact	6600
gaaatagttc	tgtattccgt	gtttgcaaca	gccagccaac	taagcagagg	ataaaccgtt	6660
agcaaatgaa	tgtaataatt	actcatttcc	aagatatcta	agcacataag	caaatacagg	6720
aacagacttc	attctttttc	ttaacaaaaa	agcatcttca	gtgtgtgatt	taaaagaaaag	6780
aagattctgg	tttcctagaa	aacaatattt	tggcctgtgt	tgattcttat	tctgaatgtg	6840
tgtttacata	atgtacagta	tatattcaga	aagtattttt	gcttcaacgt	ttactttcta	6900
tgatgtagtg	ctttgggtatt	cctacagcac	cccaccttcc	ccaacagatg	tacagtgttc	6960
tgtctccatt	cgaaatctac	aatgtaatat	gagtgcatg	tatgggtttg	aaaccaaagg	7020
atgaatgaag	cattcagaga	cttaatat	gaaaaaggaa	tagtcagtat	tttatatttt	7080
attacaggta	ctgatattta	taaattta	aaactgtacc	atgctgctgc	atgttttcaa	7140
gtacatgttg	aacagtaagg	attggggagt	tgttttttta	tggtcaccta	aagcagctgc	7200
tatagaaatg	ttgaaactaaa	attttgcac	tggtcatacc	ttcatgcatt	tatcatttgc	7260
agatatTTTT	ccatcattat	taaaaaacag	gaacttttag	gctctgaaga	tcatgtggac	7320
cagagcaaat	taaagtccag	tttgtgtc	aattcattgc	cagacttcat	tggaatgctt	7380
tgtttgatga	tgtatgttca	ttctcagctt	tatttttcaga	tgcttaactg	ggcaacgaag	7440
tctaacttca	ggttgaactt	tctcatgttt	aatctcaggc	taaagttaaa	tgatatttgt	7500
aaagtttgaa	taaaattctg	tttactcatt	ttgagttagt	atgaaaaaaa	gtgattgtat	7560
gtttaagaat	tgaaattgtt	cattttgtga	taaattgatta	attccaaga		7609

<210> 5210

<211> 3948

<212> DNA

<213> Homo sapiens

<400> 5210

ccagacccag	ggctacctgc	ggagtccaca	ggaccccctg	cgccggggcag	ccgccgtgct	60
tataggtgag	gccgcccggg	gtcacactgc	ccctggcacc	ggggcttttg	gagctggggc	120
agcctcccc	tggggggctg	tggggcctgc	actcatgcat	ctgctgtggt	ccaggcttcc	180
ttgtccacca	cgccagcccc	ggctgtgtca	accaggacct	gctggactcc	ctgttccagg	240
gtgaggcccc	accttgccag	gggatgggtg	cctggagacg	tggctgggtg	tagggcggag	300
tggacgggag	cggtggggtg	agggccaggg	gcccggcact	cggcctcctg	ggctccccag	360

cctgagccgc	gatctcctcg	cagacctagg	ggactgcag	agcgacccca	agccggctgt	420
ggcgccggca	gcgcacgtg	ccgctcagca	gtgggcgat	ctggcccgtg	cccggggctg	480
ccccgcggc	cccgcttct	ccgcatcgcc	ccgcgccccg	ccgggcccc	accagtcttc	540
gccgacagcc	ccttccagcg	ccggagcgtc	gcgggccgct	ggggctgctc	cggacccccgc	600
cgagcctgag	gctcgggctg	gggccgaggg	ccagggtcog	actcgggcac	cccacgcgca	660
tagcagcctg	tccccgccct	gacggagggg	ctccctgggc	ctggtgctgg	acgccaatgc	720
cctccccac	ccccacccc	cgtgaccct	cttcaggcac	ccaccaccct	gatggtgaca	780
gagggggaca	gccagcaccc	atctgtcccc	gtcagggctc	ttgtttctac	agccccctgg	840
agcatgcccc	atgccccaac	cttgggcctg	gctcctggcc	cagatggcac	ctggcctctt	900
gagtctgctg	ggggacccca	aagt1ggtgg	tcccatagcc	tgccctcctg	ggtctccacc	960
tcatgcctgg	acaggacgct	gtggcctgtc	cgggccttgg	ccagccctgc	agctgcaccc	1020
ccgatcctca	tccctcacc	cattccctgc	cagcatccta	aggctcctgg	cgggcctcct	1080
ctctgctcaa	aattattgac	ctgtctcccc	gccacacctg	ctgtgccctc	tcagccaggc	1140
catcatcacc	ccctgttcat	tatgtcaggc	ctcatgggag	cctggccctt	tccagaagct	1200
ggccccggcg	tcctcccaag	ctggaccacg	taggccccag	atcacacctg	ggggtccaga	1260
tgtaggggtc	ctgtgtgcac	gccaatcag	accgagcact	tgtgacacta	ccccaacacc	1320
tctcccaggg	ctgaatgagg	aacgcgccac	tggacacatg	aggaagaggc	tgctctggga	1380
gctactgatg	ctgtgacctc	acctctctgg	ctttgggcgg	caggctccctg	cacctaggat	1440
gcctgcctgg	aaatgtcctt	gcattcgtgg	cctccttcac	agcctcctcc	tcagagaagc	1500
ctctgcgagt	gcacagggag	tgtgtgcagc	cttgtgaagg	gctgggacca	cttgcccaga	1560
ctggggcccc	tcaggcacag	gcgtggggtc	ctactgacct	gtctccccag	ctcccacaca	1620
gaaagcatct	aaaataaaca	cacgtggatg	gaaagcgttg	ggcatctggt	ttgagtgtgg	1680
ttatggggagc	tgaccctggg	ccaagatctg	gctcagggtg	gggtaatagg	ccatagtccc	1740
tgatatggcc	ccaggtagag	tcagtttggc	agcaggggta	aaggtcaggc	aggctccagg	1800
cacaggctat	ggccaggtea	ggttggggtta	accctaagac	agagaagctg	cgtctgtgtc	1860
taacaggcat	ggaatggatg	gggttagagc	tgctcagacc	ggggtgagtg	tcctcttgca	1920
tgctcatatgc	aggaagctga	gggatcagggtg	aagggccccg	gtcttcgtgg	agtcagggggc	1980
aaggtttggg	ggatgagttt	ggagcctcca	cagcagatac	caaaacggga	ttcaacatac	2040
cagaaacaga	tagagagaaa	gaggccagag	aggcagaggc	caccagatgc	ccagtgaagg	2100
tcagatagac	ggaagcccca	tggacgtccg	tgctagcctt	caggaaagctc	tcaaaccagc	2160
catctgtccg	aggtcgcgac	ctcccaggac	gggctaggag	cacccatggg	gggcacaccc	2220
tcggcactgg	cgggggacggg	tttcggggaca	cagccacatg	gatcgtctca	gtagcagccc	2280
caaagaggga	agcaaggccc	gcctccttgc	tcaccttgca	accaggagcc	aggccccagg	2340
gcaagcatgt	gctgccacc	tagcacaggc	tgccccacac	cccacagcac	gctggacagt	2400
ctggtgggca	aaccaacag	tgatgccacg	ctacccccag	atgggggctg	aggcggggag	2460
ctggctgtgg	tgggcaggca	gcacccctgc	gctcctcccc	ctccctcatg	gtgcccggga	2520
gagtccgcgc	cgtcctgcgg	caggctgtgt	gcagcgcagg	cgggcttgcc	ccatacagct	2580
ccctgttagg	agtgtgtcca	gccccgcctt	gctctgcact	gcccagaacc	tggttgccct	2640
gccaggagtg	agattcatgc	aaagtccaca	tggcctctag	agtgtgactc	ttccctgctg	2700
gaattcctgg	gaggctccag	gtggcacagt	gggctggctc	ctccatgggg	atgctgtgtc	2760
cccagggtcc	atcagatcca	cctgcagaga	gccacccca	gggcaaatat	tccaacgggg	2820
tctaagattg	ggggcaaga	ggcgaggctc	accctgacac	tcattccctt	ttcacctcca	2880
gccagtgggc	cgggacagtc	ttggcctgga	tgcccaaca	atctctaacg	ggccatgttg	2940
ccagagagct	cattgggtgg	gcagctctca	agatggggct	cagggtgtggc	ctgtcacatg	3000
gcatggcctg	ccggtctcag	ggccccgagg	ctgtgccttg	tgtgcctgcc	tttccaaatg	3060
ctttctagga	cccggtctac	tcccaccca	ctcacccttt	caggtcaccc	gaaagggttt	3120
tccaaggagg	accatgagtc	tgagaggcgt	tgagtttgtt	cctacactgt	gggtaggagt	3180
gtctaggaga	ttctgtaact	tggatctgag	atactggagt	ttgttttgtc	tcctgtttca	3240
atgttaatgt	cactattcat	agcaataccc	catctctaca	aaaaatgaaa	aaattagcca	3300
ggactgggtg	tatgtgccta	tcgtccagct	actcagcagg	ctgaggcggg	agaattcctt	3360
gagctcagga	gatcgaggct	gctgtgaacc	atgattgtcc	cactacacag	cctgggtgac	3420
attgcaggac	cctgtctctt	taaaaaaaaa	aaaaaaaaaa	aaggccaggc	gcggtggctc	3480
acgcctgtaa	acccagcact	ttggggaggcg	gaggcagggtg	gatcacgagg	tcaggagacc	3540
gagaccatcc	tggtcgacac	ggtgaaaccc	ctgcagtgag	ccgagatggc	gccactgcac	3600
tccagcctgg	gcgacagagc	gagactccat	ctcaaaaaaaaa	aaaaaaaaagt	ctgctgggtg	3660
cggtggtcca	cacctgtaat	cccagcactt	cgggaggcca	aggtgggtgg	atcacaaggt	3720
caagagatcg	agaccatcct	ggccaacatg	gagaaacccc	gtctccagta	aaaatgcaaa	3780
aattagctgg	gtgtgggtgg	gtgtcctctg				

<210> 5211
<211> 331
<212> DNA
<213> Homo sapiens

<400> 5211
cccaaccagg tccagctcca ggccctgttc cctgtcccca gatcacaccg agtcagcagc 60
cttccctaga cccgccgctt cctcgctccg cgctggccgc cccctccac ccttgcagcc 120
cctctctgtc tccgcctgcc ctgactgcgc cctcccacgc agacacggga ctcaatccgc 180
gcctcgccgc tcgggtcct tgggactctg gtgcgccggg gccggggcgg gctccggcct 240
ggggctccgc ggccccctgc ggaagctggt gctgcagagt ctcgtgccgc tgctgctgcg 300
cctgcatgac cccagcaggg acgctgctga g 331

<210> 5212
<211> 835
<212> DNA
<213> Homo sapiens

<400> 5212
tttccttcgt atgccacctt tattgtgttt ccccaactcc tgggccccat ggtagactgg 60
ccacatggct actgggctcc tggccttcct agggctagca gctgggtgggc aaacactctg 120
ccctgctgga gagctgccag gccatgcccg ggcacaggct agtggggctc ctggctcagt 180
cctgatagca gtgccaggga ggctagagt gcacacatgc ggccctgggc ctgcggctcc 240
cagcacagct ggggagtgtc ctccccagc tctaggccac actcgtccag caagaccag 300
gccggtgctc cttcgcccca gctgttcccc aggagcccg ggggcaggga catggtgctg 360
cgctcctgcc acggggcact ctgctccaag aggctgcca cctgccaaga cagggcagga 420
gtgagtcaga tggggaaatc tgggcatctt gtgcctgccc ataccacccc tcccagggtg 480
ccacagggcc ccttccactg gctcagccca tctcctgca gcccgaaacc aaccctctca 540
ccagctcgag cggccccaac agggctctgc actccagcgc ctccgccagc agcttgtgct 600
gcgtttcaact cagcactggg agagagtcag gtaaaagggg gtttctgaac gccaccggg 660
aaagcccacc tccctccctc ccaccgccca cctgccccca ggggccgctc actggtcagt 720
gccccagca ggtagacaac agggatagcg agttccggca ccagcattcc ggagacaaca 780
ccaggcactc caggacagca cctgctggac cgtccagggg ctccaccggc ccaag 835

<210> 5213
<211> 2446
<212> DNA
<213> Homo sapiens

<400> 5213
ttccagctgg catcccgtg ctcagcaaca gccccacccc gctggagagc aggtctgggtt 60
acatgtctgc caggtgagcc tccctggggg ctggttgggg tggaaagtca tagtcgagct 120
gctcactgtg cctccctggg caggtggacc tctgagggga gcagacctcc tggcttacc 180
ccaagaaatc aggcaggcct ctagtccaca gagctgtccc cgcttgccctg ggtctgaggc 240
gccccctcat gaccagggga aagtcaagtt cacaccgcca aggtcccagt ggggaagggc 300
tgggcttacc ctgccaaccc cctgaggaag ctgccctctg gccctgtgg ggaggagtca 360
gccccctggtg ggaccctgcc cccgccccctc cctctagccc ctccagcccc ggagctggc 420
ctttgtcttt gcccttgagc tcttgtttgc ttcctgtggc tcccttattc cccagtcct 480
gctgagcaac atctggagt agaggacac cctgtggagg agacagacgg gcaattattt 540
aaacctgtta ttaattttcc attcatctca ttccttgcca aatgttttcc cctctccctc 600
ccttaggcag ctaacagtga gtacccccca ctaaccctt ggccaacttg agagctgatg 660
ctggccaagg attgagttga cagaggggag cgctttgctg atgagattgg cgggagcagg 720
cggtatgtgg agcccagagc cttgtatcag tagcaccag caagggggca gagggcctcc 780
accactttcc cgtttgggaa ctgttctgga ggggcagatg ttttgaagct ttgaattgct 840
agggacctcg gagaagctgc tctggtagct gagagaaaga gggaggagggt gacagatgtg 900
atggcctctg tgcatectct gtcacttccg cgctcctct ctcccctcgc catgctctcc 960
tcttccttcc cagtgagcag ctccggctcc tacagcactc ccattcgcaa gtccctgagg 1020
cgggcagcac cacctttcag ggcataattg aggcccaaccg gaggtggctg gaacgtgtca 1080

```
<210> 5214
<211> 3502
<212> DNA
<213> Homo sapiens
```

<400>	5214					
cccagctccc	tccccgggac	cctaagagca	ccccaccccc	cacctactat	ggctccctgg	60
ccaggttctc	agccttatca	tctgctacac	ccacgtccac	ccaatgggcc	tgggattcag	120
ggcagggggc	caggctcccc	tcctctgtgg	ctcaaacggg	ggacgacttc	ctgttggaga	180
agtggcgcaa	gtattttcca	tgtaaagccc	acctgtgggc	gagccttccc	acctgcttcc	240
tcctctctct	cttctcttct	ttctctctac	ctctcttctc	ctgctccttt	tctctcttct	300
ctcttttgca	tccttttgcc	acacctctcc	tcccccaacg	ttaccatagt	ccattgggtcc	360
attgactcta	cctgtgggtc	cctgggggaag	gagacattgc	aggtggccct	gcagccagga	420
gttctatggg	ttgggacggg	ttagatggag	cctggctgac	tggggccttt	attgtggatt	480
ctggagctca	gtagaaccta	aaagggtcatt	gtcgtcatta	tcttaatagc	taccatcttg	540
tgcaatacat	gatggggcaa	gcagtttata	tatatTTTTT	catttagttc	ttaattctct	600
gaggtagtaa	ttattttatcc	ccatttttaca	gatgaggaaa	ctgagtttca	gagagtttaa	660
gtagtatgct	ccaggttacc	cagtgtagtga	gtaacaaact	cagttgtgac	cccatgtctc	720
tgtgactcca	ggattctgct	tgggaacctct	tggctgtgtg	gctaattctt	gcttctgagc	780
caggtggcct	ccccaggtct	gacccctgct	gaggattatg	aaaagccata	aaacaaggca	840
tttgagggga	aacaaaatat	cttctTTTTT	ccctaacccta	aattgaaaag	tagattaagt	900
tttaaaaaata	aaataaatag	gaccatttct	gtctctcacc	tgtctctggc	ctccagccac	960
tgaagctttt	cctttttattg	tttattctgg	ggaggcaaga	ggtgctgggtg	ggcaggggtg	1020
tgaccactgc	ccattttctga	gtcctgtccc	catgctcttc	cagctggcat	cccgtgtctc	1080
agcaacagcc	ccaccccgct	ggagagcagg	ctgggttaca	tgtctgccag	gtgagcttcc	1140
ctgggggctg	gttgggggtg	aacgtcatag	tcgagctgct	cactgtgcct	ccctggccag	1200
gtggacctct	gagggggagca	gacctctagg	tcttacccta	agaaatcagg	caggcctcta	1260
gtccacagag	ctgtccccgc	ttgcctgggt	ctgaggcgcc	cctccatgac	caggggaaag	1320
tcaagttcac	accgccaaag	tcccagtggg	gaagggctgg	gcttaccctg	ccaacccctt	1380
gaggaagctg	ccctctggcc	cctgtgggga	ggagtcagcc	cctggtggga	ccctgcccc	1440
gccccctcct	ctagccctct	cagccccgga	gtctggcctt	tgtctttgcc	cttgagctct	1500
tgtttgcttc	ctgtggctcc	cttattcccc	cagtctgct	gagcaacatc	tggagtgaga	1560
gggacaccct	gtggaggaga	cagacgggca	attattttaaa	cctgttatta	attttccatt	1620
catctcattc	cttgcctaat	gttttccct	ctccctcctt	taggcagcta	acagtagta	1680
ccccccacta	accttttggc	caacttgaga	gctgtagtgc	gccaaggatt	gagttgacag	1740
aggggagcgc	tttgctgatg	agattggcgg	gagcaggcgg	atgtggggagc	ccagagcctt	1800

gtatcagtag	cacccagcaa	gggggcagag	ggcctccacc	actttcccgt	ttgggaactg	1860
ttctggaggg	gcagatgttt	tgaagctttg	aattgctagg	gacctcggag	aagctgctct	1920
ggtagctgag	agaaagaggg	aggaggtgac	agatgtgatg	gcctctgtgc	atcctctgtc	1980
acttccgcgc	ctcctctctc	ccctcgccat	gctctcctct	tccttcccag	tgagcagctc	2040
cggctcctac	agcactccca	ttcgcaagtc	cctgaggcgg	gcagcaccac	ctttcagggc	2100
ataattgagg	ccaaccggag	gtggctggaa	cgtgtcaaga	atgaccccag	gttgatcctt	2160
tttacctggg	tcccaaactg	ggctgggctg	tggggactgt	gcttgtgccc	tgaggggctg	2220
aggaggatcc	tgttcagcct	ttgacccttt	catggcccct	gcctggctat	gcccagcgac	2280
tgcagttttc	cttcaccttg	tggccagacc	tctcttctct	tcaacaccca	agccaaaagc	2340
tactttgagc	ctcctgcagc	tgggccttga	tgagcacaac	agagtgaagg	tgtatcgctt	2400
ctgaggccct	gagcaggggc	ttggggcagc	ccagcctctc	ctccacccag	accaagtgcc	2460
tgaggagctg	cctgccttct	tccatctgag	aaagcaccgt	ccttccccct	tgacttgca	2520
ggagccacca	gggaccaggg	ggttgagtgg	aacagtaaag	ccacacattc	tgtgactata	2580
taacctatct	caggctaaaa	tgtgtggact	cgtacgagct	cttgtcattg	acatggcaag	2640
ctgatggcgt	gcggtggctg	cggggatatca	gggcccggag	ccctttggga	ggaagggagg	2700
cgtagagga	gctgccttcg	gaggctcagg	gagtcctctt	ggagctgggt	gtttccttgg	2760
ccctgcagcg	cactgctcgg	ggctcccaag	gaggttgtgt	gtatggttct	taattcatca	2820
ggacaaagac	ccccagcatg	tgtgtaccct	gggaccgat	ttctctgggc	ccacatctat	2880
ctccaatacc	tcagcctcag	atcagaccct	ttcttttttg	tctttcttct	cttaattttt	2940
aaatgcctct	tttcttgagc	attccatctc	tctttttgac	cctctcagga	ttgggcttag	3000
ctgtccagag	ccctgccgga	gggtgctggg	ggctgtccct	ctgcaggcac	tgtgttttcc	3060
tcaggggctg	tcctcagaac	accctcctg	ctccctgggg	ctcctcaggg	agccatttca	3120
gctggagtct	caggtctcaa	aaacagcttc	tccgggaggg	caaaaaaaga	ctgggttggc	3180
ttctggtcct	catgacggct	tttatcctcc	tgggacactt	tgggtatatt	catgggcatt	3240
gtttccatct	gtcttttcta	cctgtgccac	ccctgccctg	attccacggc	tgccctcagg	3300
aggcaggcaa	ggagctaggc	cggtgcccgg	ccctggcagg	aaggggtctt	tgtgcagtgt	3360
gagatgctgc	cgttgtggca	gagcgtcctg	cagccccgct	tccatcagca	ggctctgggg	3420
tgggggcttt	gcaggggatg	ctctctgatg	tttgttccgt	tgtttaaata	aaatgcactt	3480
atttttgttt	ttttttttgc	aa				3502

<210> 5215

<211> 1798

<212> DNA

<213> Homo sapiens

<400> 5215

gcggaaaggg	cacaacctgc	tgaagaagaa	agaggagaag	ctgaatcagt	tggagtcctc	60
tctttgggaa	gaggtgcagc	cccattgtcca	catagtccag	tggggccctg	ccttcctctt	120
ctgttcttgg	gattgggttg	agttcttttg	tcctgcatcc	gggggagttg	ggcctctagg	180
gcccaggatt	gggcagtagg	cttgtctact	ggctgatgaa	ggtggcagtg	gcttcaattc	240
tgagtttgtt	gaagacacct	gtgggttttg	atacctgtgc	tgaatggtcc	ggaatatacc	300
tggaaacctt	tgctaaaggt	gcctgagaag	agggccaagc	ctttaccctg	ccctggctcc	360
taaggacagg	tgtgaccagg	gtgtcaggaa	tggacacaca	tgatagattt	tcctacctgc	420
cttgggacct	tgtggacttt	ctcctagatg	tctgaggctt	aggtgtagcg	ggggaggctt	480
aggtggagta	acactgcagg	gagagcttac	tgggaagggt	ggtgggggtc	tgtgtggacc	540
tgatggcact	gttgtctctg	tctcaggcat	ttgggacata	tgctgagcct	tgccctccctc	600
ccaccctgct	gtgaggcagc	ctgtgtgatt	tgcttcgccc	agggtacctg	gtggaactct	660
gggccccaga	ggagtctact	caccaagtcc	tcagttccca	cacatcacaa	gggcgacagc	720
ctacatacca	ccttgaattt	gtagcaacaa	aattgctagg	agaacaaatg	gagatggcca	780
tatttcatgg	atttgcgtaa	gaaaaccagc	ttaaagacaa	aacataaaga	agaacctagc	840
tcagtgtccc	agccacttcc	taggaaggaa	aaaggaaggg	tagaaagcac	gtgggagagg	900
tgggtcataa	ctgctgactt	taccccacag	gcctcagatg	agggcactct	gggaggatcc	960
cccaccaaga	aggcagtaac	cttcgacctc	agtgcacatg	acagcctgag	cagtgaaggt	1020
tctgaatctt	tttccccgcc	tcaccgtgag	tgggtggcgg	agcagaggag	tgagtggggg	1080
agatgcgggg	tgaggaccat	ggtatccatg	gaatgggagg	aacttgggga	atagaagaag	1140
agctctcttc	cctcagccct	gcagagggag	gcctctgtga	gccggtgtct	ggactagggt	1200
ctcggtcagt	gctgggaagg	aatcacacca	tctaggtttg	ccagcacgtg	gggctgaaag	1260
gtcagggaag	ccctctgaat	gctgcagagc	actctacggg	gtgaccactg	gccttgctgg	1320
cctcttctct	tccagggcct	ccttgaggag	gcttttctct	ctcagctgcc	ctggcctgta	1380
tgtgacagaa	gggccctctc	cccttccctc	tctctggggg	cctgggccct	tcacccagca	1440

ccttgccctg	gaaacctgtt	tctcatggcc	agcttctcac	ttgcactgtc	tggaaacacag	1500
aagccctgcc	atccctgacc	ccctcataag	gttgaggggc	tgttgctctgg	agaagcaggg	1560
aggggtggcc	agtaggggtcc	tccatgacag	ctgtgtcttg	gaatgggtcca	gggtccctgag	1620
cttgagtcce	ttcccaccat	ccacctcttt	tctttcagtc	gactcaaccc	cgagtctcac	1680
ctcccgaag	atccacgggc	ttagccactc	cctccggcag	atcagcagcc	agctgagcag	1740
tgtcctcagc	atcctggaca	gcctcaaccc	tcagtcgccc	ccgccgctcc	tcgcctcc	1798

<210> 5216
 <211> 1329
 <212> DNA
 <213> Homo sapiens

<400> 5216						
tttttttttt	ttaaaggata	ttcttagtag	actatatgtt	cacatgactc	gatattcaaa	60
tggtgcaaaa	gtcactccat	gagttatcta	gtgctcccca	ttgaaggtaa	aaaatactac	120
cagttctttc	tggagatttt	atgcaaataa	aaagaaggga	cacttatgat	tctcttccct	180
attactgggtg	gagtatgggt	cactcctaata	gtaggatggg	atgattgccc	caagctctgt	240
cgtgagtgg	tgattgacgg	ttttcttaag	ggaacaatgc	tgggaaagat	gataggcgcc	300
cgccactgac	ccctcccgcc	tccttgcccc	tccagtaaac	tcccacacaa	aatagcagta	360
tgaggtgtgg	ggaaataatc	ttggcctccg	tcctgggttt	acttttgact	ctgccaccta	420
caagctgtca	cctgaacaag	tcctttccgt	tcctgtgtct	tccttggtca	caagctctaa	480
gcctgaaccc	acactctggg	aatgaagcag	ggtagcggcc	tctgcttcag	caactctgag	540
gggtctacct	tgggtgggga	gttggcctca	tccagagggc	tgctggaggg	ccaagacaag	600
gctctgggtg	ggaggtgtgc	tgagagggga	ttgcttatcc	caccaccagc	ttttctgggg	660
gaggtgggga	agtgatggtt	aaaaaatgga	gttcctgcta	tcagccatgt	cctgatgaat	720
tggaaagtcc	ccttctttct	cctttctctt	tgcattctct	gcctgcttcc	cctgcctgcc	780
ctcctgtgac	atgtgccctc	tccagcaggt	atgtcacaca	gcaccccaag	ggaagggcag	840
tgtaacgctc	ttttccatga	tggactacca	cagccagagg	aagacaggcc	ttcccttctt	900
ttctagtctt	ttttggtttg	aaaacaaggc	actcttattt	ttcccttcca	agaagctggt	960
ggttcacacg	ggccagcaca	cgcattatca	aagacctagt	ttgtttctag	taaatgagtc	1020
cattgaagtg	ggagccttgg	ccgggcaagg	tggtcacac	ctgtaatccc	agcactttgg	1080
gaggccgaga	tgggtggatt	gagatcgaga	ccatcctggt	caacatgggt	aaaccctgtc	1140
tctactaaaa	atacaaaaat	tagctgggag	tggtgacaca	cacctgtagt	cccagctact	1200
caggaggctg	aggcaggaga	atcgcttgaa	cctgggaggg	ggaggcaaca	gtgagccgag	1260
attgcgccac	tgcactccag	cctgggagac	agagtgtgag	tgtctctcca	aaaaaaaaaa	1320
aaaaaaaaaa						1329

<210> 5217
 <211> 1799
 <212> DNA
 <213> Homo sapiens

<400> 5217						
gcggaaaggc	cacaacctgc	tgaagaagaa	agaggagaag	ctgaatcagt	tggagtcctc	60
tctttgggaa	gaggtgcagc	cccattgtcca	catagtccag	tgggccctgg	ccttcctctt	120
ctgttcttgg	gattgggttg	agttcttttg	tcctgcatcc	gggggagttg	ggcctctagg	180
gcccaggatt	gggcagtagg	cttgtctact	ggctgatgaa	ggtggcagtg	gcttcaattc	240
tgagtttgtt	gaagacacct	gtgggttttg	atacctgtgc	tgaatggtcc	ggaaatatac	300
ctggaacctc	ttgctaagg	tgcctgagaa	gagggccaag	cctttaccct	gccctggtcc	360
ctaaggacag	gtgtgaccag	ggtgtcagga	atggacacac	atgatagatt	ttcctacctg	420
ccttgggacc	ttgtggactt	tctcctagat	gtctgaggct	taggtgtagc	gggggaggct	480
taggtggagt	aacactgcag	ggagagctta	ctgggaagg	tggtgggggt	ctgtgtggac	540
ctgatggcac	tgttgtctct	gtctcaggca	tttgggacat	atgctgagcc	ttgcctccct	600
cccaccctgc	tgtgaggcag	cctgtgtgat	ttgcttcgcc	cagggtacct	ggtggaactc	660
tgggccccag	aggagtctac	tcaccaagtc	ctcagttccc	acacatcaca	agggcgacag	720
cctacatacc	accttgaatt	tgtagcaaca	aaattgctag	gagaacaaat	ggagatggcc	780
atatttcatg	gatttgcgta	agaaaaccag	cttaaagaca	aaacataaag	aagaacctag	840
ctcagtgctc	cagccacttc	ctaggaagga	aaaagggaag	gtagaaagca	cgtgggagag	900
gtgggtcata	actgctgact	ttaccccaca	ggcctcagat	gagggcactc	tgggaggatc	960

ccccaccaag	aaggcagtaa	ccttcgacct	cagtgcacatg	gacagcctga	gcagtgaag	1020
ttctgaatct	ttttccccgc	ctcaccgtga	gtggtggcgg	cagcagagga	gtgagtgggg	1080
gagatgcggg	gtgaggacca	tggtatccat	ggaatgggag	gaacttgggg	aatagaagaa	1140
gagctctctt	ccctcagccc	tgcagaggga	ggcctctgtg	agccggtgtc	tggactaggt	1200
gctcggtcag	tgctgggaag	gaatcacacc	atctaggttt	gccagcacgt	ggggctgaaa	1260
ggtcagggaa	gccctctgaa	tgctgcagag	cactctacgg	tgtgaccact	ggccttgctg	1320
gcctcttctc	ttccaggggc	tccttgagga	ggcttttctc	tctcagctgc	cctggcctgt	1380
atgtcacaga	agggccctct	cccttcctt	ctctctgggg	tcctgggccc	ttcaccacgc	1440
accttgccct	ggaaacctgt	ttctcatggc	cagcttctca	cttgactgt	ctggaacaca	1500
gaagccctgc	catccctgac	ccctcataa	ggttgagggg	ctgttgctctg	gagaagcagg	1560
gaggggtggc	cagtaggggtc	ctccatgaca	gctgtgtctg	ggaatgggtcc	agggtcctga	1620
gcttgagtcc	cttccacca	tccacctctt	ttctttcagt	cgactcaacc	ccgagtctca	1680
cctcccga	gatccacggg	cttagccact	ccctccggca	gatcagcagc	cagctgagca	1740
gtgtcctcag	catcctggac	agcctcaacc	ctcagtcgcc	gccgccgctc	ctcgccctcc	1799

<210> 5218
 <211> 1865
 <212> DNA
 <213> Homo sapiens

<400> 5218						
ttgtcttaca	ggtacaccag	gggttgga	aaccacacta	ggcaaagaac	ttgctcaaaa	60
atcaggactg	aaatacatta	atgtgggtga	tttagctcga	gaaggtaagg	gacacttttg	120
tggttagattt	gttttgtttt	ttttttaagg	tctggtaagt	ggagtgttag	tgctgggtat	180
tgctagtaggg	tacaaaaaac	agagattgcc	attaaagaat	atatactctg	ttagggaatc	240
cacagaaata	ttaagtgtct	aatgctatgt	cctgggttatt	ttgaccattt	tccttccgc	300
cttcaaaatg	gctggcaatt	cttgtgaata	gttgggaagg	ctcctataaa	gagactggat	360
ttcggatagg	tagaatgtga	ataaggagaa	tgtttttaag	ttgaacaaac	aaaggtttg	420
tactgctaaa	catatatatg	agcacagtga	gtatattggt	ctcactggaa	agagactggt	480
ttgagctcag	gtgtggggacc	tgactatgct	atggtatctt	agattagtgt	gagatttgca	540
tgcaactgca	tatattctaa	gatgatcatt	gtttttattt	attttaccct	gttttccct	600
aatctttcat	cgctccctta	tttgtgtctt	catcttttta	tagtcgacaa	tgattgttac	660
atggtaggaa	ctcaataaat	taaagcgacc	ttaagttgcc	tcattaaaaat	taagaaaaca	720
tatggtttaa	attttaaaaa	tttttttaca	gtttaacata	gatttaaaat	ttttttaagt	780
tcctgacagt	tgctactaaa	gtaactat	cagattgatc	taatgtacat	atttttttca	840
aatgatctaa	agtctgatca	tcggatatca	tggtgtctgg	caagacggct	tctcccaaga	900
gcatgccgaa	agatgcacag	atgatggcac	aaatcctgaa	ggatatgggg	attacagaat	960
atgagccaag	agttataaat	cagatgttgg	agtttgcctt	ccgatatgtg	accacaattc	1020
tagatgatgc	aaaaatttat	tcaagccatg	ctaagaaagc	tactgttgat	gcagatgatg	1080
tgcgattggc	aatccagtg	cgcgctgatc	agtcctttac	ctctcctccc	ccaagagatt	1140
ttttattaga	tattgcaagg	caaagaaact	aaaccctttt	gccattgatc	aagccatatt	1200
caggtoctag	gttgccacct	gatagatact	gcttaacagc	tccaaactat	aggctgaaat	1260
ctttacagaa	aaaggcatca	acttctgcgg	gaagaataac	agtcccgcgg	ttaagtgttg	1320
gttcagttac	tagcagacca	agtactccca	cactaggcac	accaacccca	cagaccatgt	1380
ctgtttcaac	taaagtaggg	actcccattg	ccctcacagg	tcaaagggtt	acagtacaga	1440
tgccctacttc	tcagtctcca	gctgtaaaag	cttcaattcc	tgcaacctca	gcagttcaga	1500
atgttctgat	taatccatca	ttaatcgggt	ccaaaaacat	tcttattacc	actaatatga	1560
tgtcatcaca	aaatactgcc	aatgaatcat	caaatgcatt	gaaaagaaaa	cgtgaagatg	1620
atgatgatga	cgatgatgat	gatgatgact	atgataatct	gtaatctagc	cttgctgaat	1680
gtaacatgta	tacttgggtct	tgaattcatt	gtactgatat	taaacaatgca	tgctggatgt	1740
tttcaagttg	gttttttagaa	aactaataat	aatgagtaaa	cacagttacc	atacttttca	1800
attgaaatga	aggtttttca	tcagccttaa	aagtgtgaaga	aaaataaagt	tgctattcat	1860
tcgat						1865

<210> 5219
 <211> 244
 <212> DNA
 <213> Homo sapiens

<400> 5219
 tttttttttt tcttttgaga cggagtctcc ctctgtcgcc cagactggag tgcagtgggtg 60
 taatctcggc tcaactgcaag ctctgcctcc cagggttcacg ccattgtcct gcctcagcct 120
 cccaagtagc tgggactaca ggcacctgcc accacgcccga gctaattttc tgtattttta 180
 gtagagacgg ggtttccaccg tgtaaccag gttggtctcg atctcctgac ctcgtgatcc 240
 accc 244

<210> 5220
 <211> 35764
 <212> DNA
 <213> Homo sapiens

<400> 5220
 gccaaagctga aagttctact ctttctagtga gaatatcaat aggtgagaaa tacttctctg 60
 agagggttgc aatttaactt taaataaaaa tggttaataaa acttggtctgg aaaaaaaccc 120
 caccacacaca cagagaaaat ttggttaaaa aaacaaagta gcagttaaat atgggatgaa 180
 gtttaataatt tgtgatgggtt ttaaaaagtgc ttgctgtttt taactccaga aggggaagca 240
 tttgaagaag gtggaaaaaag aacatatggg ctggttgaaat tagttaactg catgtgattt 300
 ggatatgggg aggaggaaga gtgtggagtc aagaatgact tccggttatt tgggttaaag 360
 aagtataata gttagatgat gatgctatta ccaaggtaga gaagacagag taataatctg 420
 tgggcagtga agcgtttgtg aatttgggga atcagggtgtg ttttggacat gtttagtccc 480
 tatggagatg tcaggtaggt tgttgaatat gtgaatctgg agctcgggga taaggtcaga 540
 tctgaagata tacgagaggt agcatattta taagccatga ttggttgagg gtacctaaag 600
 agagagtgtg cataaataaa aaaacattct cacatttaga agtctgatta ttttttaaaa 660
 gaaggatgag tcatcaaagg aaactaaaaa ggagagatca gtgaagtaag gggaaaaaaa 720
 caaaagccca gtagatgaag tatctcaagg aggaggaaaag tactgaatgt gtgaatatca 780
 aatgcagaac aagagagcta agatgagaat ggggaattga ctgggggatt tggcaagata 840
 aaagtcattg gtgaccttga taagagttgc ttcattggaag tgtcagggca tggcctggat 900
 tggagtagat ttgaaaatga gaggtgagga aacagagata gctactgtga aggagagcag 960
 aaaatagaga ccatattaga aagggtgtg agattaagag agggatttgt ttgtttttac 1020
 ttcctaaact ttttaattttt gagtcttcta gatgagcatt atttcttgtt acaattagaa 1080
 attattcata tagcctgggc agtgtggctc acacctgtaa tcccagcact ttgggaggcc 1140
 cagatgggga gatctcttga ggtcaggagt tcaaaatgag cctggccaac atggcaaaac 1200
 cccatctcta ctaaaaatag aaaaagttag agggcgtggt ggtgcatgcc tgtaatccca 1260
 gctacttagg aggctgaggc ataggaatca tttgaacca ggaaacagag gttgcagcga 1320
 gccatgttcg cagcactgca ctaccctgcc tggatcacag agcgagattc tgtctcaaaa 1380
 aaagaaagaa attgttcata taatagctac ttttattttt aaaaagaaat aaaggaggaa 1440
 tatgtcttca tctatgatta actaccagat tgttcaagga ctaagcctat tgttactaat 1500
 atcttaatat tggtaaacag ccagtagaag gagatgcaaa aggagattga ttttctggaa 1560
 catactgact ttcttagccc ttgagagtta aaattaaat atttcagagc tctccattac 1620
 cattcagtag ttgtttattc tgatagtccc ctttttatat aaaaatacaa gtgattaaat 1680
 gataaaatgt tttaaaaaga aggaagttt gtcacctgaa atacctctta tcaatgttct 1740
 aagttgccta tatgcaata ctaatctcag tatgaagaat aattttgcaa aagaaagaac 1800
 tttttttcag tcaaaaattt tctacacgtc catggaattt ggcattgccac ttaaagcaaa 1860
 aagtttttaa aattacagct ctcaagtata taatatttta ctctttctca taagtgttat 1920
 aatgagaatt attctgtagt ttatagcttt tacttttcat ggatgtcctt ttggctacca 1980
 aaagattatt gtttagttat tttattgagt tacagttagt gtctcagtgt ggagactttt 2040
 ctcttttaga gcagattttt gcatttgtgt ttatttttta attattctaa ggctaagtaa 2100
 gtaaacagta aaagatcatt gcctcctagt ttgtaaacta agaacattac acataggcat 2160
 ttaccttcta ggatttttgt tttaaagctt taacaatatg aaaaaaagaa taagtctatt 2220
 accataagat gatagggtt aatatacaca cagagtttt tccctcagct ttaactttta 2280
 catgcaatat taatctacag tgaaggcttt gaaaatactg tgggaaaatt aaccagtgtc 2340
 tagaacaatg gccttaacaa ttttctaatt tggatatctat cctagataat cttgagtagt 2400
 ctccactagc taactaagag aagcatattc actctgagct tcatgcttac attttctaca 2460
 aataagttat cctaattatg cttaaatttt cagtctttac cacatagtgc cacaatcaa 2520
 aggataatgt agataatgta caagacccca ccaccaccac gggttacctc tggttcttct 2580
 gaaccataca atacagaaaa ttatttccagt gattgttatc tcagtttatc caaggatggt 2640
 acataactag tgccattgca aaccctgata agggatttaa tccatcgtct ctaagagaga 2700
 cgagtctaag ggatacctta cagcatccat tacagggtgc tgatggatc cttacagcat 2760
 tagaatttga gtctctcaga accctgcccc taaaaaagag tttgagtctc tcttcttaga 2820

accctgtctg	atagacaatt	taacttgacc	tattaatcat	cctaattttt	ttgagagcca	2880
gaattaccct	taaagtaaca	tttaagtaaa	ctaagctgtt	ttggactctc	taaattcatt	2940
ccccatagtt	tttttgttgg	ttttttttcc	ccctagctaa	ttgtaaacgt	tctgtttgaa	3000
gaccattttta	ttttaactga	tcttttggcc	aaagagaaaa	ttgttgcatt	tttatagcac	3060
cggtttttgg	ttttttaaat	ttagagattc	catcttcttt	gtctctagag	acaaataagt	3120
ggatttccatt	aggcttttta	tacttagggg	agtaatggac	tttaatacaa	agagaaaagga	3180
gtatgccatg	aatcgtcaag	gattttataa	ttatatgttg	cctaaattat	gacaaacct	3240
ataagaaatt	ttgtgttatt	ttatgttctc	taatggtagg	aaaaattgtt	tattgacata	3300
atgaatttca	gctacaaata	ggcaagcaaa	aatgttttat	gctattttgt	tattttaggt	3360
tgtcgtgtca	actgtatttc	aatatatgtc	aaaataaacc	taacagcagt	aatattagaa	3420
taaagaatta	atatgtggat	atgttcatct	acaatgcgat	tgtcatttta	tgagcatagt	3480
taattaattt	atttttacat	tgtgaaatgc	aaactagaga	ggtaattctg	atgtttaaaa	3540
aataggataa	cttttcattt	taggtagcag	cgatggttct	gaactaagt	aagagacctc	3600
atggcctgct	tttgaaaggt	aagataaatt	gtccatttga	actacttgga	gtttattttg	3660
tctgggttaa	ataatataat	acaaattttc	agagataata	tttactacat	atcccctaagc	3720
gattaagttt	tctactggta	aaagaaatta	gaagttgata	tttaagtttg	gatattgaag	3780
taatgagaa	gaatgatagt	ctttactcta	aatgttttatt	tgggtggcatg	acacatgtat	3840
ttgaatttta	atacattttc	atttataact	taaaaataat	aaccgatcat	cgacaagtaa	3900
cctacttaca	tattcaaaaa	attatttctt	taagttctgg	ttcattttaag	taatttttaag	3960
gcatttagtg	gaatgggtcaa	ctttattctc	tgtctgtttg	tcaaggacaa	aatgatttaa	4020
taaattttta	attatacaag	taaagcaagt	taaggttaga	atttaaattgg	tcataaactc	4080
aaaattttca	gagtacactt	ttatactgaa	atactctaag	ttgtgctccc	ttctccttcc	4140
tttgttgctt	taagctgtta	aatctgtcat	ctgcctgtag	caaatatcat	actatatatt	4200
ggtctaagta	catataagat	ctgaagaatg	tgaccaaaca	atgcaaataa	ttatttatta	4260
aatgtccatt	aggatttcta	tgttttctac	gaccatttca	gttctgccat	tttcagactca	4320
taaggtattt	ggcttttgac	caaaaacaatt	gtcccttttt	ttgtatatga	actaagtaac	4380
taaaatttctg	aaaatgccta	tattcattac	tcaagcgggt	catttagatt	gaatgttaaa	4440
tgtcatatta	atactgaagt	tgaaaatgtg	taattgcata	actccttatc	agtcacaatt	4500
tataaaacaa	ttttaaatta	aatttttatt	gaaatcataa	atttcatgct	gtttaattgg	4560
aaaaatagat	ccttattttt	tatgtgactt	cataaagatt	tctcactatt	atgtgattaa	4620
gattttgttt	ataagttcta	cattgcaaag	tacttttgat	cctttctact	ctaattatca	4680
gtgttcccaa	cttttgttct	ctttgttttg	cgggataata	ataagtaaaa	acaaattatt	4740
tttattttatt	tttgcattat	ttttcttgca	acctttactt	ctgatctggt	catttggggt	4800
tgcctgaaat	gtgaaaaaca	caagaattgc	ctttgacatg	ttgtctgaat	ttgttcaa	4860
tgtctttccc	tctagaaga	acgtaaaacc	atgagaagtt	gattatagag	tgtactgtaa	4920
tctttatatt	taaaaaatat	tgattaacca	aattgttttt	tagattgctt	gacttatgac	4980
taaccagaat	gggtggtgtg	taaataatct	gttctcatcc	cagcagggtta	cttatgaaga	5040
cagtatttaa	tgatgttacc	ttcacgtctc	aaaacaattt	ttttgcttta	taacagggtg	5100
tttgctttgc	agacatgtgt	ggctaaaaaa	agctactttt	cttatgccaa	gtttaaaaata	5160
gtgggctctt	agaacatttt	gagaacagtg	aaatgaatgc	tgcccagcaa	gattcagaca	5220
tgaataata	gaaagtgaat	aaagaactag	gatataaagt	actactcatg	gatagtgaac	5280
ttgaaaaatg	tactctgaat	gttgacatac	cattttctgt	tcttattttc	tagacagaca	5340
tcaaatacat	tgtcttattt	tctagacaga	aatcaaatac	attgttgtct	ttttttctag	5400
acagacatca	atacatttgt	ttaaagttgt	aaaataatgc	ttttccttta	aaacatcatt	5460
tatcaacagt	gctttcgggt	tttcctaggc	aaagaagtat	cagtattttt	atgtgtctgt	5520
ttttattttt	tttgttttta	actattatgt	gccatttttg	ataagtatta	actcatcatt	5580
tttatcattt	attggctttg	tcagttaatg	tagaaaataat	ataacgccta	tattactcag	5640
ttcatttctt	ttatttacta	taaaggataa	agaggaaaaat	aaagtttttc	tcatgagttt	5700
acaagccaca	ttgcttttag	gtgtcttcat	agggacatat	aataaaaaatg	aattacttat	5760
ataaatccgg	gcatacatat	taaactagaa	tccaagaagt	ggtagagaaa	cgtaagaatt	5820
tttgaagtat	ttttgaggtt	ttttttttat	tatttggcta	taaatagctc	tttaattctt	5880
ttagcagatt	tgtgaaagtg	aatgtatatg	taaatatatg	gtgtgtacta	aatacctcta	5940
agtattttcta	gagtcaatag	tagaagaaaa	aatttttttga	aatctatgct	gcatgcttta	6000
aaaaagaaaag	aggaacaatc	acatactatc	cttttgtgaag	atttagaaaag	ctatattaca	6060
agaagaaact	attatactgt	tctaggtatt	gataatgact	gtgtgaataa	aagtatatgt	6120
aatatataca	atttataatg	gaatccaaca	ggaacagatt	ataccattct	ctcggcccg	6180
tgacaagagt	ggcacgaaat	ggctatcgaa	gtcacatgaa	ggccagcagg	tacaattccc	6240
ctgcattcag	gggtcacatg	actccccttat	gggtgttggtg	attggcttac	atgggtgtgg	6300
tctgacgtta	tttcttttct	ttctcaacta	attgtatttaa	aaactaaaca		

tagccttttaa	actgcaccag	tcttttcta	gctgatagtt	tttgaatgaa	caatataaaa	6540
atctgcttct	ttattcataa	gttgtaatca	aagcattttc	tttgctaata	aatttatatt	6600
tgatttgtct	ttttaaaaag	tttttcagat	aaactacagg	tcctgaatgt	agacgagttc	6660
atttcataaa	ataatcattt	gtatatttta	attcatattc	attcagttgt	ttgtctgggt	6720
aaaccaggtc	tcttttggac	tgttattagc	tgtggaggca	gataaggggtg	gtgtattgat	6780
tgggaacgtg	gggttttagtg	gtgatgggta	atcagttcat	aatacaacaa	aataccaaac	6840
ttcagaagca	aactttacgt	cagtttgatg	gtgtctaata	tccgtgcatg	tacctccctg	6900
aatataaata	gctctagcat	gaaatttcta	ctggtttata	ggttcttaag	tcactctgaa	6960
gacacctaaa	taatcacaaa	ggaataaaact	ggcaaaactt	agttttcatt	gctcttatag	7020
gaattctgca	gctcatgtca	agtcaccagt	gacatttttg	tcagcatgta	tgtttttattg	7080
gctcatgtag	aaatcattaa	ttattgtatt	aaacatagga	ccttaaataca	attagggaaa	7140
gatattaaag	tgttggttat	tttgtgattt	tttttttttt	aaaagataca	tgaaaaggaa	7200
atcttgagtt	ttgggttttt	tcctttcgtg	gagagctatt	aggccataat	cacttatcca	7260
ttgacaccat	ttaaatgtta	ttaaaatgta	ttgcagaaag	ctagttttta	aaatatatta	7320
ttattgactt	tattacttct	ttctgctatt	ttagaattaa	attaagcatg	ttttcttttt	7380
ttttttttga	gcttgatttt	ttattttcag	ttttatatat	acttaaatac	ttttaacaaa	7440
tagaatcctc	atttttccta	ccaggactta	aagtttctat	gtggaaaata	agggttgcaac	7500
agtgatgcag	tgtggcatgt	taagaagaag	aaaacaaatc	ttaaattttt	aatttaatat	7560
ttactaaagt	gaattactgc	attcttttcta	aattatactg	ttcaaataatg	taataaagtg	7620
tgttttttaa	ccatctgctg	actttaataa	cttttctaata	aactttttgt	acagcttata	7680
aatttcaaga	ttataaaacc	tttagaattg	tcagtgtctt	ctcagctctg	aataaagtaa	7740
caaactttta	aaattaagaa	taattacatt	ttatttaagt	acctacttga	tgactattgt	7800
agacaaaagc	tcttatgtgt	tcttttcttc	gttattatag	ttctgcagaa	tcagaagatt	7860
tggcagtaca	tttatatcca	ggagctgtta	ctattcaagg	tgttctcagg	agaaaaactt	7920
tgttaaaata	aggcaaaaag	cctacagttaa	gttttcatca	tattatattt	taatacacct	7980
ctaaaaatat	gcaaattttat	aagactctgt	aaaagtacta	aaacaattaa	aataaaacct	8040
gattatagta	gacttgaaat	aatattaaat	aaggctctcc	cctcttatcc	ttgggtcatc	8100
cattccaaga	ttccccgggg	atgactgaaa	cctcagatag	taccaaacca	aattaccatc	8160
atttggaaca	tgtttctgtt	catgtcttcc	attcacaaat	ataatacctt	ttctatctta	8220
actaagcact	taagcccaca	cagtaaccgt	aacttttgca	gtttgcatg	ctatagcaaa	8280
actagcatga	atttcttttt	ccttcttcac	aatttcacag	atacaaaatt	tgttcttacc	8340
atggatctta	gcaaccttag	cgtctaattt	ttcttttctt	aatccaagaa	gttttctttt	8400
cacttaagga	agcagtgggg	agtgggacag	aagggtagca	catatagtgt	ggagacgctg	8460
gacaaagaaa	gggaagatta	tgtccacaga	agcacagagc	agaactgtgt	gagattttat	8520
catgttactc	agaacaacac	atgattttta	aaactgtgaa	ttgtttattt	ctcaaatttt	8580
ccaataaata	tttttagact	atgggtgcct	gtgggtaact	gaaaccacag	ataagaggga	8640
aaatattgta	cacatttggt	tcaccatgtt	ttcttaacat	aaaatgttat	tatatgtgcc	8700
atatagattt	ctgttaaata	atgtgttaag	gggtgcttaa	tcctgtactt	ttttttacc	8760
ccattatagt	tcgtatacaa	aattatttct	tagagaaccc	tgaaagtata	tcatgaagaa	8820
gtatttttagt	attaagttta	ggtaaaatag	aaaataaaga	gtaacaaccc	taaaaaatgg	8880
aatttgattg	tgttttatca	ttttatttta	attcctgtaa	tacagttttg	ttttctacat	8940
aacatagaat	ccaaatatta	aatgcttttc	aaacctataa	ctatatggg	gggggaaaaa	9000
aggaagattg	gtggaacaaa	gctcttaata	tgtatcaaa	aagtttcttc	ttcctcaaca	9060
ccagcatagt	agtttgacta	ctaaggaaca	atttttttcc	ctttctcaaa	tttgaaatat	9120
aaaacctttg	atatatatcc	acacttaag	cttttgaaga	tatgggggct	tcataaagt	9180
aatcttattt	tgttgtttat	atcacagtaa	gccaaaggca	catacaaatc	aagaatctct	9240
taggcaggct	agtgaactca	gaattgcatg	tcagttgaag	cattaccata	ccttttgtgt	9300
gctggatgct	agaaatagag	cagtgaacaa	ggtagggcaa	agtgtcttcc	tcctggatta	9360
catttcagtg	aggagaaata	gagaataagg	ctttaaaata	atgtcatagg	atacagaatg	9420
atggggcaag	gagggatgcc	accatggcaa	aacatttgag	ctgagatctg	aatgaggaag	9480
gtgagttagc	tgtgtgaata	tctagagttc	aggagacaag	aaggcttggt	tagtttacgc	9540
attgaaattg	gggaagggtg	aggagatcaa	gtgaagggca	aaagctggag	ttgtttgtatg	9600
ataaattaaa	catgatgtat	gagagaaaga	gtgaaaacaa	agataacttc	taggtttggg	9660
gactgagatg	ggtgtatgtt	ggggacattt	attgaaatgg	ggggcagggtc	agtcttggtc	9720
aagttcagtt	tgatatgctt	attaaacatt	caagtggagg	tgtcattgtg	gctgttgaaa	9780
aagtatggat	catgaggtca	gcagagaggt	ggcaggggag	tagatttggg	agtcattagc	9840
atacagatag	atagtatttg	aaatatggaa	ctggatgata	gattatctaa	gaagaaagta	9900
tagctagaga	agaaaacaag	gttgagagatg	gggctctgta	gcattaaagg	tctcccacaa	9960
agaagagtat	aaaggaaaaa	taagggaactg	ttatcccaga	agcctagcag	ttacagtact	10020
tcaaaaagca	aagagtggcc	agctgggtca	gatgctgtta	agaggctggc	tatgataagg	10080
atagaggctt	tgctaaaatt	acaatcatca	gtgaccttga	tggcccaaaa	gccaaatgaa	10140

atagatgtaag	tagaaaaatgg	gcaaaacaga	agaagtagag	gcaagattta	gagacacct	10200
tgcaagaagt	tatgctgtga	aaaggagaag	agaaattggt	tggtgtctgg	ggagttagga	10260
gatgggtcaa	aggagggtat	ttaaagggtg	gagtactatt	aagggttcatt	tgtataatgg	10320
tggtagaggg	agagagattg	agaagcaatg	gagttaattg	caaaagcaaa	cttcttttatt	10380
ttttttttct	tttttttttt	ttattatact	ttaagtttta	gggtacatgt	gcacattgtg	10440
caggttagtt	acatatgtat	acatgtgcc	tgctgggtgcg	ctgcaccac	taactcgtca	10500
tctagcatta	ggtatatctc	ccgatgctat	ccctcccccg	accccacaac	agtccccaga	10560
gtgtgatatt	cccccttctg	tgtccatgtg	atctcatgtt	tcaattccca	cctatgagt	10620
agaatatcgc	gtggttggtt	ttttgttctt	gcgatagttt	actgagaatg	atgattttcca	10680
atttcatcca	tgctccctaca	aaggcatatg	actcatcatt	ttttttggct	gcatagtatt	10740
ccatggtgta	tatgtgccac	attttcttaa	tccagtctat	cattgttggga	catttggatt	10800
ggttccaagt	ctttgtctatt	gtgaataatg	ccgcaataaa	catacgtgtg	catgtgtctt	10860
tatagcagca	tgatttatag	tcctttgtgt	atatacccag	taatgggatg	gctgggtcaa	10920
atgggtatttc	cagttctaga	tccttgagga	atcgccacac	tgacttccac	aatggttgaa	10980
ttagttttaca	gtcccaccaa	caaattttaca	agaaaaaaaac	aaacaacccc	atcaaaaagt	11040
gggcgaagga	catgaacaga	cacttctcaa	aagaagacat	ttatgcagcg	aaaaaacaca	11100
tgaaaaaatg	ctcatcatca	ctggccatca	gagaaatgca	aatcaaaacc	acaatgagat	11160
accatctcac	accagttaga	atggcagtc	ttaaaaagtc	aggaacaac	aggtgtctgga	11220
gaggatgtgg	agaaatagga	acacttttac	actgttggtg	ggactgtaaa	gcaaacttct	11280
ttaaaaagt	agagagagtt	ggaatctagg	gcataaaaaag	agagttgagt	ttgccttttag	11340
atagaatcgg	ggttaactat	tctttttag	ctggaggaaa	gactgagtat	gtgggtctac	11400
aaacaggtag	ttacatggca	gtgacaggag	tatttgagat	taagatttca	gaagtgtac	11460
agctcaactc	tgaggttagg	actttgggtg	aagtgaagt	gacttgatca	ttggcactta	11520
gaatgtaaag	aaactaagaa	gccaggagca	ttgtaatat	atattcctgt	gtttgtccta	11580
tccaggtagc	atctttggga	aaatatggg	cagcttttgg	tgggacacag	cttttttact	11640
atgctgccaa	atctctcaag	gctaccgaaa	gaaaacatgt	aagtatttgt	tctctacatt	11700
tttagcgtgg	tttcccagag	tgttcatggt	tataagaaa	gcagtcctaa	tgggatacaa	11760
agggtttttg	ggtttgctt	gttttttct	atcttctagt	ccaaaagttt	ttacatttat	11820
ttctttttta	aataccattt	ttccattgca	aatgtcaaaa	ctgcacatta	cgcttatcta	11880
ttttgacatc	aaagctttct	caaactctgga	gtttcctgtt	caatattgtt	caaaactatt	11940
gccttgagg	ttccttttct	aatcagcaaa	atgtggaaat	gtgggaccaa	catctaaagt	12000
tctttccacc	tcaatctctg	gttcagtgat	tcttcccaac	aatgaagagg	aatgatcaat	12060
tacaacagtt	actgcaatca	ctttcttgtg	cttcatatta	cttaaaagaa	gcctcttttc	12120
accctgtaga	atttttctat	aaactttttt	tgcattgtgt	tttgttttta	cataccagtg	12180
atagaattctt	tgaagggaag	aatgattttc	tatgttgc	taataaaatc	tgagaggaat	12240
tttatttcta	agtcacatgt	tttgggggag	aaaaattacg	tggtttatcc	tactgaggaa	12300
aggtaagcca	gtgaagaaaa	atttaagtc	tttttctact	taaaacttaa	ccaaatgata	12360
ctgtataatt	cagagtaatt	cagagaaact	cttctttatt	ctcacagttt	tagcccttta	12420
atcaaaccac	aggatatagaa	agaacattt	ttggtttaa	tgaatgtggg	aagtaccgta	12480
agatagcatt	gcctttcttt	atcagctata	cccaccacct	gccaccctcc	tgatcatcat	12540
gactcattgt	cttgcttttc	ttcatagtgt	tagcatatat	gtttccctaa	ttaatccatg	12600
gtttcatttt	ttaatctgtc	ctcagtgga	tcataatat	tcttaagcac	tagctttttt	12660
gctcactatt	attatataat	tgttaagata	gctcttgc	tgagataaag	gacttgagt	12720
aaggatcatg	gagatttctt	cgggtgaatat	tatttttttg	tattctggtc	aaattgacaa	12780
taatgcctat	ataccctaca	acatttacat	agattagttt	tgctagaaca	atgtgtagag	12840
ttagtactgc	tgttctcaaa	gtgagaaaaa	ggttggtatc	attcagttca	attaaatcct	12900
tagcttcata	tggaaagtaa	cttttcacat	agccacattg	agatacttgc	tggatagatt	12960
tcacttagct	gactattgta	gaaaagtc	tattcaaaat	aaaatgggtt	ttttgttttt	13020
tgttttttct	tagtttcaat	tagaaaaagt	ccaaattaga	gaagttataa	ctgaatttgt	13080
catctaattg	atatgtttaa	tattgttttt	tgctttgc	tggtgtgtgt	gcataaagtt	13140
actagtatat	tatacttttg	gtttttaatt	atatgaggtt	tctgataggt	aatgtatgca	13200
aaatggtttg	aaattaaagc	atagttagtt	gtgagaaaat	cttattaggt	accaaggaaa	13260
ttgaccgcat	ttctcatctt	ttctaattaa	attaaaatat	aattaaagaa	taaatttgaa	13320
gaacaggata	gagggtatag	agacaggctt	atatctatat	ttggtattaa	tcttgagata	13380
gaaaagatat	ggcacagaa	taaatggaag	aaaaaaattt	taatcgtttt	caaataaagt	13440
tagaatacaa	ataaattgga	ggaaaatatc	tgctatatgt	aagcaaccga	aaaaggatta	13500
aaatcaccat	ttaaacatag	caccacctgt	attgttgtgt	tttggttttg	gttttggttt	13560
tggttttggt	tttggttttt	ttttttgcca	aaatatttaa	c		

aatttataaaaa	gctataaaagg	ttattatttgg	aacaacttaa	gaaaatgtaa	catggacttt	13860
atgtggttgt	ctcttcaatt	tcttagaaat	gacaattacg	ttgtgattgt	ataggaatat	13920
attcttgtta	ttaaaagata	catgttgaaa	tatttagggt	tcaatgttat	gatgtctgca	13980
atttgcattt	gaatgttcag	aaagatcaaa	caaacacaaa	aatgtagatt	aaggatatat	14040
ggctaatacat	tgtggcattc	tcaacttctg	tacagtttga	atTTTTTcaa	aataaaaaagc	14100
tggaggagaa	aaaaaatcat	agattaaaaat	atacctgttc	atggcaataa	accagaagt	14160
gggacatatg	gaagtctgta	taccttattt	tagtattcta	taaagtatat	atTTTTTtgc	14220
ctatgaagaa	cagttttgtg	gggtagagt	atcaacctca	cttactattt	aaaaatgcaa	14280
attaagggag	acacttttct	gccattagac	aaaactttaa	aagattgatg	acatagcatt	14340
ggcatgata	tggggaacaa	gactgtcatt	catggctggt	aaaaatttaa	attggtattg	14400
tttttgtggt	ggccagtcg	agtcagtatt	tagcttggtg	ataaccagaa	attcctcatc	14460
tgagaatctg	tcctactgaa	atTTTTTgaac	aagtgcacaa	agattatctg	tagaagaata	14520
tttctataat	atTTtatgaca	acagaaatct	ggaaataccc	aaaatactta	tcaataagga	14580
aatgggttact	gatagatgaa	aaacacaagt	cagagtgtaa	atatatcccc	cattaatacg	14640
taaaaaccaa	cagcagcaat	gacacaaacc	tctgatataa	taaatgcata	gaataaggtc	14700
tggagggttgt	cacctcaagt	gatgattata	tctggggaat	gtgatgggat	tcgctgggtg	14760
ttaaagggca	tttgcactct	agtttcatcc	ctgtttctga	agcagtttat	gttctgtgag	14820
ttacttttta	ctTTTTTgaaa	aaggggaattg	aggTgggaagt	ttttaggctt	aagaaaagaa	14880
tattagaaga	tcatagtatt	catgtcgaag	tacattatga	gctgtcaa	cagcagtcct	14940
gtggtagggc	caatttcatt	cttcacagta	gtaaaactta	ctgatttctt	tagctttcat	15000
atttcaattt	catgttggtt	tgaatgtgcc	atgttcattc	ttttcccat	ttcctttaat	15060
cgtgaagcat	atcatacata	caaagaaga	taggtagtgt	acatgtacat	tttaaagcat	15120
aataaataaa	atgaacacct	gtatactctc	cacccagtg	gaggaacaga	atgttactag	15180
aaccgtcaaa	gccttcccag	aggcatccac	ttcttccctg	tcaaccatat	ccacagcttc	15240
ttgctgtcct	gaatttcttg	ttaattgtcg	ccttggtttt	ctttagtgtt	ttaccatgta	15300
cagctcttta	tacaatgcac	tgtttgatt	ttaaacaata	cctgaattgg	ttcacatata	15360
gtcttaagca	ctagcttaag	ccaacctgtt	cttcttttat	aactgccctt	tctcagaatt	15420
aagaaaagaa	gttgtagcta	aaataataat	aaaagaatgg	ttactacaa	aagtaataga	15480
caggctaaga	atacccttct	tttttgaaaa	atacaagtaa	gaatattgtc	attaagaatt	15540
atctggttgc	agggagctga	gatcacacca	ctgcaccaca	gcctgggcaa	cagagtgaga	15600
ctgtctcaaa	aaaaaaaaaa	agaactctct	gatagcactg	ctgatttatt	acatcatcag	15660
atttaagaca	gcatagctac	taaaatgcaa	atgtccttcc	tataaggagt	agtacagtaa	15720
ttcagaaaaa	aaacaacaga	ttaatatatc	atattcacaa	acatgctctc	tgggaatagg	15780
gaatagatca	gttaggtttt	gatgcagagt	tgaagctggg	aaggtctgga	aagtaggaga	15840
ttatctgaag	aaggcatgcc	taggatgaaa	ttcagcagta	aaaggcccca	ggctggctga	15900
gaccagcatg	aagtcacaaa	tctcatcttt	cattaggaga	aactgaaaat	acactcccta	15960
acactgaagt	tttgctagaa	taaaccataa	atTTTctgtt	tccgctaatt	atctTTTTTT	16020
ctctcagttc	aatcaacat	ccaataagaa	cgtatctgtg	ataggatgga	tgggtgatgat	16080
ggctgatgac	cctgaacatc	ctgatctctt	cctgctgact	gactctgaga	aagggtgaatt	16140
gttagaataa	ctggggctta	cgatactgcg	tatgtgtttg	tgtatatgta	tgtatgtatg	16200
tgtgtgtgta	tacttgtcat	atatataatg	ttttatgcat	acatgaagaa	cttgatgagc	16260
caaaacctag	tttcactgga	atactcaaga	gagaaagtat	ttgtgtagtt	ttatctattg	16320
ggaataactt	ctgtcccatt	atgtatttta	ataaatTTtg	tggagcttat	tttctttgct	16380
ccatgggcat	atatgcttga	aaattaaaag	cccagctaat	ccctagagac	ctaactagga	16440
aaggagggag	ggaatttgag	aatatatacc	ccattgttac	ttcaaatttt	tagagacttg	16500
ccatataggc	catactgctt	ccttcatcaa	taccttgaaa	tggattgtta	ttcttaagtt	16560
ctgaaagtgg	cagagttttc	ctttaaatat	ttattctatc	acttttaatt	aaattattca	16620
gaaccaatat	tctgcagtct	tatccacaca	gatctagaga	tgccacacaa	ttattgtatt	16680
tatttagatg	tattttattc	taaagaatat	ttaagaacaa	aattatttct	tttaatccat	16740
aagcagcaaa	acagtgactt	tctgaatata	tttggtcag	atcaatttcc	aagttaatta	16800
taatatttta	catacagtat	atagagagac	acttatgaat	aaaactaactg	gctattgacc	16860
attggagttt	ataaagtaga	tatgagaaat	tggaggatgg	gccatgtata	atcacatcat	16920
atgttcttct	tactctacct	gtgactatag	tggatacctc	aaggctcatc	agaaaatatc	16980
cccaagtggg	tgcttttctt	ccatcataac	aactgctagc	tgttgacaag	taccagaaag	17040
atactttcag	cagttcacaa	ctggaatact	atgttacctt	ttattgactt	cacaactata	17100
ttttgacctc	tgtttattca	gatactattt	tgtatcaaca	gatatcccac	ttttatgttt	17160
cagtgtttta	agtaaacaag	taagcaaata	tgttggaggc	aggaaaaaat	aataccaaaa	17220
tgtcttcttt	ttagattaag	tagattgatt	tacagaataa	atacacccta	ctcaacattt	17280
tttttcccat</						

atcattctta	tgcttttgca	tcctcatagc	ttagctccca	cgtatcagtg	agaacatatg	17520
atgtttgggt	ttccattcct	cagttacttc	acttagaata	atagtttcta	atcttatcca	17580
ggtcactgca	aatgctgtta	attcattcct	ttttatggct	gtgtagtatt	ctatcacata	17640
tatataccac	agttttctta	tcactcgtt	gattgatggg	catttggggt	ggttccatga	17700
ttttgcaatt	gtgaattgtg	ctgctgtgaa	catgcgcag	caagtatctt	tttcatataa	17760
tgacttcttt	tcctctgggt	agatacccag	tagtgggatt	gctggatcaa	atggtagttc	17820
tacttttagt	tcctcagggg	atctccacac	tgtattccat	agtggctgta	ctagtttaca	17880
ttcccaccag	cagtgtagaa	gtgttgcatg	tttaccacat	ccatgccaac	atctactggt	17940
tttttatttt	ttttattatg	gccattcttg	caggagtaag	ctagtatctc	attgtagttt	18000
tgatttgcat	ttccctgatc	attagtata	tggagcattt	tttcatttgt	ttgttggcca	18060
tttgtgtatc	ttcttttgag	aattgtctat	tcatatcctt	agcccacttt	tcgatgggat	18120
tgggtttttt	cttactgatt	cgttttgagt	tcattgtaga	ttctagatgt	tagtcctttg	18180
tcagatgtat	agattgtgaa	gattttctcc	cactctatgg	gttgtctggt	tactctgctg	18240
actgttgctt	ttgctgtgca	aacgctcttt	agtttaatta	gggtcccaact	atztatcttt	18300
gtttttattg	catttgcttt	tgggtttttg	gtcatgaaat	ccttgcctaa	gccaatgtct	18360
agaagagttt	tccaatgttg	tcttctagaa	tttttatagt	ttcaggctct	agatttaagt	18420
ccttaattca	tcttgagttg	atttttgtat	aagggtagag	atgaggatcc	agtttcattc	18480
tcctacatgc	ggctagccaa	ttatcccagc	accgttagtt	aaaaaggggtg	tcctttcccc	18540
actttatgtt	ttgttttgct	ttgttaaaga	tcagttggct	gtatttgggt	ttacttcaga	18600
gttctctatt	ctattccatt	ggctctatgt	cctattttca	tagcagtacc	atgctgtttt	18660
ggtgactgtg	gccttacggg	atagtttgaa	atcaggtagt	gtgatgcctc	cagatttggt	18720
cttttcactt	agtcttgctt	cggctgtggg	gggctctttt	ttgattgtat	gtgaatttta	18780
gaattgtttt	ttctgatttt	gtgaagaatg	atactgggat	tttgatggcg	attgcattga	18840
attttagatg	tttgcttttg	gcagtatagt	cattttccca	atattgattc	tacctatcca	18900
tgagcatggg	atgtgtttcc	atttatttgt	gtcatcagtg	atttttttca	gcagtgtttt	18960
gtagtttctt	tgtagagctc	tttcgactcc	tttgttaggt	atattcctaa	gtgggttttt	19020
gttttggttt	gttttgagc	tattataaaa	ggcgttgaat	tcttgatttg	attctctggt	19080
tggtcattgt	tggtgtatag	aagcctactc	aaaattttga	attcaaagcc	ccagcctcct	19140
tcccatatca	aaggcataat	tcacgaaatt	acatttcaag	atgagagcat	tttcattgga	19200
tttagttaac	agattctttg	ttttcttcag	tttctcttag	catgcctaata	agaactactt	19260
caggtagcca	aaattttatg	aagtctatct	atactaattg	ttttttgcgg	gggaggggtg	19320
agtatgtaaa	ttgtagctgt	ggccagcttt	attgtagata	tggccttttt	tcacattgac	19380
ctaattgtctg	tgtctgagtt	cagcaagtgt	aacggtgtta	cttgactaaa	catttggtga	19440
agaaacaatt	acttcagaaa	gtgaaaaagt	tattttgagt	gttagaatct	caaggaaaag	19500
ctgaataatg	cttaaatata	gttaggctct	tgagccattg	aatgcagtta	ttaaggaaag	19560
aatagaattc	agcacaaaatt	gtgaaataaa	aagaacttag	gtcaatgaaa	aaaggaaata	19620
aagcttaatt	tagagcagcc	tatagtacat	ggatcctttc	ttttctcaat	ttgttttctc	19680
accttaatac	atataaccat	ttaaaatatc	ctcattatat	gtcagtcttg	aattaaagtc	19740
aatatagaaa	ttacaaaata	cacacagcac	aatgaatat	ctaatttctt	aaaagagaga	19800
aagttgcctc	ctagactttc	cccaagagcc	ctcaacagaa	ctggaaatct	gtaataatat	19860
tgacaaatat	cttgtaacta	aagactaaaa	gcatagtcta	tcaatgttat	atgactaatc	19920
cttaattata	ctgaatagct	agtgtttaag	tattaaacat	attgaagcat	tctggcagt	19980
taaaacttaa	cattaacatc	tactaatatt	taggccaggt	gtgggggctc	atgcctgcaa	20040
tcccagcact	ttgggaagcc	aaggcaggca	catcacttga	ggtcaggagt	tcgagaccag	20100
cctagccaac	atgggtgaaac	cccgtctcta	ctaaaaatac	aaaaaactta	gctgggcatg	20160
gtggtgcaca	cctgtaatcc	cagcttattg	ggaggccgag	acacgagaat	ctcataaagc	20220
tgggaggcag	aggttgcaat	gagctgagat	tgtgccactg	cactccagcc	tgggcgacag	20280
agcgagactc	catctcaaaa	aaaaaaaaat	ctaataattt	gatcatctaa	gtagtaagta	20340
ttcagaacca	atattctgca	gtcttatcca	cacagatcta	gagatgccac	acagttattt	20400
tatgtagggtg	tatttcatte	ttaaagaatat	ttaaggagac	aaaattattt	cttctaattc	20460
ataagcagca	aaagtgactt	tctgaatata	ttagatgcatg	ttaatgtgtt	gcatcgagaa	20520
ctctttattg	tattggaaat	acaataaaaa	taggaaatac	aataaaatgg	agggtgtgaa	20580
tagaattcta	aaactgaaaa	ctctagtcac	gtttaatttg	ctcattatta	tctggcagaa	20640
ttattatgtg	tcgtccttac	atttttaata	tttccccctt	attttggata	attttaggaa	20700
attcgtacaa	gtttcaagct	ggcaatagaa	tgaatgcaat	gttatgggtt	aagcatttga	20760
gtgcagcctg	caaagtaac	aaacaacagg	taagcatttc	tcctaattct	cagaatagtc	20820
cataatttgg	gaacatatgt	aaaagagttc	caagagaagt	aaacagacta	gttctgaatt	20880
aactaggaga	atgggtggtgt	ttttattcct	gttgattaca	gttaataaga	tatgaagggtc	20940
tacatcttag	tgaggagcta	gacagtaatc	atgcaaacaa	gtaacaaaat	ttcgaacagt	21000
cagaactata	taaagaaaac	aatagacgta	tgtgatatag	agcaatggga	gtacagacaa	21060
cttttgataa	cataagggtg	ggcagcaaag	atctccctga	ggagatggta	ttgacaagaa	21120

ccacaagaag	gaacgagcta	taagaagagg	agagcagagt	gctgtgtaag	ggaagagcaa	21180
gtgcagggag	cctgaagctg	gaacaagctt	aaggtgagtt	caaagcacag	aaaggtagct	21240
agtatagtag	tcagagtata	gttctctaaa	gggtaaaaaat	tagatggcat	attaaattaa	21300
taaaaattat	tcgaattcat	ctttatttga	tctattgaca	atltgatgtg	ggtttctgtg	21360
gtggtagtga	aacaaaaaac	catttaaatt	ttgtttgctt	ttattttact	gaaacaaaaa	21420
tggtctaatt	gaaaggtctt	cagctgcaga	agagcaggaa	tccatttgtg	tgttttcccc	21480
aaaccctgtt	gcacagttag	agttgaacca	cagattggta	gagcagacat	aaaacacata	21540
gccacattta	tagaaattta	tatagacttt	ttgtagaacc	agttgtttgt	taaatatatt	21600
tgaaaatcat	tgacttagca	tattgataat	gcagaagtct	atggtttagca	ttatcagtag	21660
gtaatattga	atatgatgca	ctatataagc	ttagaaagct	tacagaagta	tttttcaccc	21720
tgtcatatca	ggatgtaagt	tattaccctt	tcttgataat	tgaaactaag	gctccataat	21780
acaaaatgac	ctacacaggt	cacacaagta	aaaaatgggtg	gattcaaact	ttcttcatcc	21840
tttaagtcca	ttctttttgt	ttgttttttg	acttttgggt	tcagagggta	cttgtgcagg	21900
tttgttacat	gggtatattg	tgtgtcactg	aggtttgggtg	tataaatgat	cctgtcaccc	21960
agttagtgag	cagagtaccc	actggttttt	caaccgtcac	ccctctccca	ccctccccac	22020
tctggtaatg	ctcagtgtcg	attgttccca	tctttgtgtc	taggtgtatt	caatgtttac	22080
ctcccactta	caagtgaagaa	catgcagtat	ttggttttct	gttcctggat	taattcactt	22140
aatggctctc	agctgcattc	atgttgctgc	caagggcata	atlttactgt	tttttaaaaa	22200
tcactgtgta	gtattccata	gcatatatgt	accacatttt	ctttatccaa	tccactgttg	22260
acaggcacgt	aggttgatcc	catgtctttg	ctatagtgtg	tactgctggg	atgaacatac	22320
atgtgtcttt	ttggtagaac	aattttattt	cctttgggta	tatgctcagt	aatgggattg	22380
ctgggttcag	tggtagtctt	gtttcaagat	ctttgagaaa	tctccaagct	gctttccaca	22440
gtggctgaac	ttacattcct	accaagtgtg	taagcattcc	cttttctctg	caaccttgcc	22500
aacatctgtt	atltttttgac	ttagccattc	tgactgggtg	gagatgggat	ctcattgcaa	22560
ttttgatttg	catttctctg	gcaatttagt	atattggccg	tttttcaa	gcttgttggc	22620
catgtgtatt	tcttctcttg	agaagtgtct	gttcatgtcc	tttgccact	ttttaatggg	22680
gtttgttttt	gcctgtaaat	ttaagtttct	tatagattct	agatattaga	cctttttcag	22740
atacacagtt	tgaaaatatt	ttctcccatt	ctctaggaat	gttggtttat	tctgctgata	22800
gtttcttttg	ctctgcagaa	gctctcta	taggtcctgt	ttgtcagttt	ttgtttttgt	22860
tgcaactgct	tttgagagtct	tcattcatgaa	gtctttgcca	gggcctgtgt	ccagaatggt	22920
atatactagg	ttatctttca	gggtttttat	agtttttaggt	tttgcattta	agtctttaat	22980
ccattcttgag	ttgatttttg	tatacagtgt	aagggaagggg	tccagtttta	atcttctgta	23040
tatggctatc	cagttatcct	agcagcatat	tgaataggga	gccttttccc	cattgcttgt	23100
ttttgtcagc	tttgtcaaa	atcagatggt	agtaggtgtg	aggcattatt	tctgggctct	23160
ctatactgtt	ccattggttc	tatcctgttc	catgggtatc	tgtttttgta	ccagtagcat	23220
gctatttttt	ggttactgta	gtcttgtagt	atagtttgaa	gtcaggtagt	gtgatgcctt	23280
cagctttgtt	ctttttactt	agaattgctt	tagctatttg	ggcttttggt	gttgttgttg	23340
ttgttgttgt	tcccatatga	atlttcta	gggtttttct	aattctttga	agaatgtcat	23400
tggtagtgtg	ataagaatag	cattgaatct	gtaggttggt	ttggacaata	tggacattta	23460
acagtattga	ttcttccaat	ccatgagcat	ggaatgcttt	tccatttggt	tgtgtcatct	23520
ctgattactt	tgagcaattt	ttgtaattct	ctttttcttt	tttaattttt	tttttttttt	23580
tttttttttg	gagacggagt	cttgctctgt	cttcaggctg	gagtgcagtg	gcgcggtctc	23640
ggctcattgc	aacctccacc	tcccggttc	aagcagattc	cctgcctcag	tctcccaggt	23700
agctgggagt	acaggcgtat	gccaccacgc	ccagctaatt	ttttgtattt	ttagtagaca	23760
aagggtttca	ctgtgttagc	caggatgggtc	tcgatctcct	gacctcgtga	tccaccacc	23820
tccgcctccc	aaagtgcgtg	gattacagge	gtgagccact	gtgcccggct	tgtaattctc	23880
atagtagaga	tcttttacct	ccttgattag	ctgtatccct	agatattttt	ttctttttgt	23940
ggctattgta	aatggaattg	tgttcttgat	ttggctctca	gtttgagtgt	tattggtgta	24000
tagaaatgct	gttgattttt	gtacattgat	tttgtatcct	gagactttgc	tgaagtgtt	24060
tatcagatct	aggagctttg	ggtcagagac	tatgggggtt	tctagacata	acatcatata	24120
gtctgaagag	agatggtttg	acttctctct	tctatttgaa	tgccctttat	ttcttttctg	24180
tgtctgattg	ctctggctgg	gacctccagt	aagtattatg	ttgaatagga	gtggttagag	24240
tgggcatcct	tgtcctgttc	cagttctgta	aggaataact	tccaactttt	gcccatttag	24300
aatgatgttg	ctgtgggttt	gccatagatg	actcttacta	ttttgagata	tgttctttca	24360
gtgcctaatt	tgttgagggc	ttttaacatg	aaaggatgtt	gaattttatc	aaaagccttt	24420
tttgcatctt	ttgagatgat	catatgggtt	tctgttttta	atlttggtta	tgtggtgaat	24480
cacatttatt	gatttgcatt	tggtgaacca	accttgcatt	tcaggaataa	agtctacttg	24540
attgtgggtg	attaactttc	tgatatgctg	ctggattcag	ttagctaata	ttttgttgag	24600
aattttttgtg	tctgttcatt	aggtatattg	acctgtagtt	ctgttttttc	attgtatctc	24660
tgctagtttt	tggaaatcaga	atgatgttgg	cttcatggaa	tgagttaggg	aggagtcctt	24720
tctttctcga	tttttcggaa	tattttcagt	aggattggta	ctagctcttt	ttcgtacata	24780

tggtagaatt	caactgtgaa	atccacctat	ttcaaggcct	ttttgggttg	gtaggttggt	24840
tattactgat	tcagtttttg	aactcattat	tggtcttttt	agggattcag	tttcttcctc	24900
attcaatctt	cagaggttgt	gtttccagga	atztatccat	ttcttttagg	ttttctagtt	24960
tgtgtgcata	taagtgttag	tctctgagga	ttttttgtat	ttctttggag	tcagttgtat	25020
gtcacctttg	taattttctga	ttgtgattat	ttggatcttt	tctcttggtt	tatttgtaa	25080
tctagctacc	agtctatcga	tcttggtttt	tctttcaaag	aaccaacttt	tggttcattg	25140
cttttttcta	tgcattttca	catctcaatt	tcattcactt	ctgctctgat	tttggttatt	25200
tctttttttc	tgctagcttt	ggggttggtt	tccttttggt	ttgtttttct	agttcctcaa	25260
ggatgatgtg	taggttggtt	atttgagctc	tttctaactt	cttgacatag	gtattgagtc	25320
tgatatgttg	tgtctctggt	ttccttagtt	ttaaatacatt	ttttgatttg	tgtcataaatt	25380
tcattcttta	cccaaaagtc	atttggaaga	aagttgttta	agttccatat	aatttgtgtg	25440
ttttgagaaa	acttcttggt	attgatttct	agttttattg	tactgtagtc	tgaggctatg	25500
ggttggtatga	tttcaatttt	tttgaatatg	ttggcacttg	ctttatgccc	aagcatgtgg	25560
ttgatcttag	agaatgtgcc	ttgtgccaat	gaaaagaatg	tatattcttg	tgttggtgaa	25620
tgaagtattc	tgtagatgtc	tgttggtgct	agtttgtcaa	atgttgagtt	taagtccaga	25680
acatttttgt	tagttttctg	cctcagtgat	ctgcctgaca	ctatcagtg	ggtgttgaag	25740
tcttccatta	tgtagttatc	taagtctctt	tgtaggcttc	taagaacttg	tttccctaatt	25800
ctagatgctc	caatggtggg	tgcattgtatc	tttaggatag	ttaagtcttc	tggatgaatt	25860
gaacccttta	tcattatgta	atgcccttct	ttgtcctttt	tgaccattgt	tatagtctgt	25920
tgtatctaatt	ataagactag	caacctttgt	tcttttttgt	tttccatttg	cttgataaat	25980
cttgctcctt	acctttactt	tgcacctagt	atgttggtac	atgtgagatg	gttctcttga	26040
agatagcaga	cagttgggtc	ttgcttcttt	ggccagctta	tcactttgcc	ttttttgcct	26100
gtttacattc	aaggttacta	ttgatgtgtg	aggatttaatt	cctgtcatca	tgttggttagc	26160
tgcttggtat	gtagacttca	ttgtatagtt	gctttatagt	gtcagtgga	tataactta	26220
agtgtgtttt	tgtggtggca	gttatttttc	tttcattttc	acatgtagca	ctccttaaag	26280
gacctcttgt	aaggcaagtc	tgtatgtagt	gaattcctta	gtctttgctt	gtctgaaaag	26340
gattttctgt	ttccttcact	tatgaagctt	agtttggtgg	gacatgaaat	tcttagttgg	26400
aattttcttt	ctttaaggat	gctaaaaata	ggccccagc	ctcttctggc	ttgttaggct	26460
tctactgaaa	ggtccactgt	taacctgatg	aggttccctt	tactgcccc	tttctcaagc	26520
tccatttaag	atttttttct	tttgcatgta	ccttgagaga	tgtgatgatt	aagtgtcttg	26580
gggatgctca	tcttgtagat	tatcttggtg	ggagtctgaa	tttcttgagt	ttgcacatca	26640
acttctgtag	caagattggg	ataatttttg	tggatcgtat	cctcaaatat	gttttccaag	26700
ttgcttactc	tgtctccttt	tcttgtagta	acaccagtga	gtcatagggt	tagtctcttt	26760
acataatccc	atatttatca	aaggttttgc	tcatttttaa	aatttttttc	tttaagtgtt	26820
gtctctggtt	atgtgaagga	gtgctcttcg	agttctgaga	ttctttcctt	gggttggtct	26880
attctgttgt	taatgcttcc	aattgcatta	tgaatttcct	aggctgggag	tgggtggctct	26940
cacctgtaat	cccagcactt	tgggaggcca	aggcaggcag	atcacttgag	gtcaggagtt	27000
cgggaccagc	ccggccaaca	tgggtgaaacc	ccgtctctgc	taaaaataga	aaaattagct	27060
gggcatgttg	gtgcatacct	gtagtccag	ccactaggga	ggctgaggga	ggagaatcgc	27120
ttgaacctgg	gaggcagagg	ttgcaatgag	ccaagatcat	gccaccgcac	tccagcctgg	27180
gcaacagagc	aagactccca	tctcaaaaaa	aaaaaaaaga	aagaaaaaga	aagaaatttc	27240
tagagtgaat	ttttaaatc	cagaggttca	gtttggttct	ttcttaaaat	ggctgtggtt	27300
tctttcaact	cttggtattg	tttactgttt	tctttaaact	gggtttcact	tttctctgta	27360
tctcactgag	cttccttgct	attcagattc	taaatccaaa	gtctgtcatt	tcagtctggt	27420
taagaacccat	tgtctgggaa	ctattgtagt	tgtctggagg	taagaagaca	ctgtggtttt	27480
tagagttgct	agagtctctg	cattggttct	ttctcatctg	tgagggtgta	tattccttta	27540
tcctttgaag	ttgctgactt	ttggatgggt	ctttttgttt	ttatgttttt	gatttccctt	27600
cagggtttga	ctgtggtata	agttgggtat	agtcaattgg	cttcccttct	ggatgtcttc	27660
agagaaccaaa	ggttcagctt	ggcactcctg	ggctgtgtcc	tgtaactccc	aaggggctgg	27720
gactgggccc	ctggcttttt	cctctggcct	cttgagggtg	accaccggct	gcactgggtg	27780
gaccaagggtg	ctcccaggct	gctggcaaaa	cctctccatc	aggctactgg	caaaagcact	27840
tcctcagggg	ccactgttga	aagtgttctg	gcaggatggt	ggggggccact	ggtaaaagca	27900
ctatggtgac	agtcgcccgc	aaaagcattc	caacagaata	gtggaagcta	cactgtgtgc	27960
ctgctcccat	gggagtggcc	aaacaggggac	cttggaaggg	gccagtagac	agtgggacat	28020
gcagctcaga	ctcaccctcag	tcccatggga	aacacagccc	tgtctctctc	aaatatggca	28080
gtagcagaag	gtcagagcca	cctagaggag	tatgaagagc	cttggtgggt	gggcgcctat	28140
ggccgtgttc	ctttgcagct	ttccccacac	cataccccc	gggctccatg	tagacctaag	28200
ttctgtctct	gccagctctc	caggcagttc	cccctggcaa	ctcaaataatc	caggaggact	28260
atgggatctc	ctgccactag	gatcccagcg	gtttgtgggt	agagtgggccc	attccacagt	28320
tactttactc	accccttcct	taggagctgt	tcaggaccag	gaatgagtc	cagcactcca	28380
cagccctgtg	cagggttcct	agcttcttcg	ctcttcaacc	ctggttctgc	atcatctctc	28440

tata

35764

<210> 5221
<211> 386
<212> DNA
<213> Homo sapiens

<400> 5221
gtttgggtta taagtcagca tttttaattt tatctttcaa atttttaagt cttttgtaat 60
tggattttatt gtcgatttat tagttcagta gaaaatggta tccttgaata gttttctttt 120
ttcttaaatag ctgttttctg attcagtaaa atgccttggt tgcctaaaag cttttatttc 180
ttacttttacc tgaatttgga aatgggattt tgtcaacaat gcatttatat ttggggacga 240
taaatagaaca ttacagaggg ccatcataaa taaaatcagg atagcaatat acctttttaa 300
aagagttaca accttttatat caagacagtc attgtttgtc ttaacaaaa taagtcaaaa 360
ataacagcta taaaaattat tttctt 386

<210> 5222
<211> 437
<212> DNA
<213> Homo sapiens

<400> 5222
ctgtaaattc taggatcagt ttgttatgtt ccatgaaaac actgttggtta tttttattgg 60
aattactttg gatttatagg ttaatctgag aattcacagt tttgaaaaat ttactccttt 120
catctgtaca catgtctctc tgttcattta gggcttttaa tgccttcag taatgtttta 180
cagttttctc ctgagtagtc tcttacattt tttattagtt tatgtctaag taagttagtt 240
tttctttcta ctatgaatgt gacttttttg ttacatttcc tcattgacta ttgtgtgtag 300
gaatgccatt ggtctttatg ttgattctta tatctagcaa ccttggtgaa ctcccttacc 360
tagttataat ggtttgtcca aagatctgtt ggaattatat tagtggcaaa taagaatagt 420
tgtttcttcc tttccaa 437

<210> 5223
<211> 6585
<212> DNA
<213> Homo sapiens

<400> 5223
ctcttccctt gcagcctcga agcggaggat cctgtgtgcc cagccgggca tggcgacccc 60
caccagcttt tcgatgacac aagttcagcc cagagccggg gctatggggc ccagcgggca 120
cctggtggcc tgagttatcc tgcagcctct cccacgcccc atgcagcctt cctggctgac 180
ccggtgtcca acatggccat ggcctatggg agcagcctgg ccgcgcaggg caaggagctg 240
gtggataaga acgtgagtgg gcggggctgg tgggagtggg gggatgcacg gggccacagg 300
gcttcagact tgagctctgc ctccccagat cgaccgcttc atccccatca ccaagctcaa 360
gtattacttt gctgtggaca ccatgtatgt gggcagaaag ctgggcctgc tgttcttccc 420
ctacctacac caggtcagca cccccagggg aatgtgggtc tgcagtgggc ctgtgggggg 480
ctcaggggtg ggggcaggtg catggtggag cggggagatt cgcctcgagg gaggagggcc 540
tgtagcaggg tgggaggggc ctggctctga gggctctgcc cgtctcccca tccccgcagg 600
actgggaagt gcagtaccaa caggacaccc cggtggcccc ccgctttgac gtcaatgccc 660
cggacctcta cattccaggt ttcacctcc cccaccctg caccctcctc tctcttcgg 720
gcctatatgt agcgggtgtg tgggtgcctg gaggccagg gcagttcttc ctctgggtgac 780
cagtgtctgt gtgtctgtct cccacagcaa tggctttcat cacctacgtt ttgggtggctg 840
gtcttgcgct ggggacccag gataggtaag ggaggcctgg ggcaggccga ataagggtgg 900
gtttgggagg cccatggttg gtcaggaagg tctcagttcc aaggtctcag ttcccccttc 960
aggacagccc cactttgtc ccagttggcc caagatacag ccctcagggt cactgtcagc 1020
atcaccctcg cctcttccct gtccttccca cccacatgca ttgcgtcacc atccccctgtg 1080
ctgggtgacc cttctccatc cacccttcc cttggcctct actaccagac ccacctcat 1140
cctccctctg tcatcaccag ctccccactg caccctact ccagcagcag ccaggatggt 1200
cctgtctgag gtgcgggccc ggccccacct gccccgccct gctatccatg gctcccaatc 1260

aagccccagc	tcttcagcct	ggcactgccc	ctccccgtgc	acgctccggt	ctatttccttt	1320
ccttggggagg	gctggcactg	tctcctgggg	ccttgtcaca	tcaactcccc	tctgcccagg	1380
agcgtgttcc	cctccactac	tgccgagtac	ctgcacatcc	ctgctggctc	cattccagta	1440
tcacctcctc	cggggaagcct	tccctgcccc	caggctagat	caggccccctc	ctcttgctca	1500
catcgccctg	ttcttttctt	ttatggcact	gaacacatct	gtcattaact	aactggtgag	1560
gccctgggga	tgtggcagag	gccaagggct	ttgtccctga	ccagctcctt	cctgcaggct	1620
tcagctcggg	gtcccccttc	ctgggaagcc	ctctctgaca	cctgtctcct	gactgtcagc	1680
acagccccct	gtgactccag	ccctgcctgc	tctgggtgtc	actgtctagg	gatgggtctg	1740
ccatcctctc	tggatgggat	ttccgtggga	ataggatagc	gcgcacatcc	atcttgggtca	1800
ctgccagggtg	tccagcccta	cccaacacag	agctgtcccc	agatgggtgc	tgggggtggg	1860
gggtctgaac	cagccaacca	agtggcgggg	ctttgtgcct	gcaggttctc	cccagacctc	1920
ctggggctgc	aagcgagctc	agccctggcc	tggctgaccc	tggagggtgt	ggccatcctg	1980
ctcagcctct	atctgggtcac	tgtcaaacacc	gacctcacca	ccatcgacct	ggtggccttc	2040
ttggggtaca	aatatgtcgg	gtgagtaccc	ccgcccttca	cgccagcccc	agcccttggg	2100
ccttgtcctc	acacagcctc	ctctccctcc	cccaggatga	ttggcgggggt	cctcatgggc	2160
ctgctctctg	ggaagattgg	ctactacctg	gtgctgggct	ggtgctgcgt	agccatcttt	2220
gtgttcatgg	tgagctgggc	tcggggctgg	tgaggctgag	gcacagggtgc	cccggaggca	2280
tccaggcatc	caagcagagg	atgtcagggtg	tggggttcag	accagagaca	cattgctgaa	2340
ctgaggagcc	ctggagtggc	tgcccgccct	gggggggtcag	gagggccttc	tgggaagagg	2400
ggtatcctga	gccctggaag	aggagacacc	agccagggtg	ctagagggtg	gggatcccca	2460
gcacacaggc	tccaggctgg	gctctcactc	tcattccact	ctccttacat	gggagccttc	2520
ctgccagaat	ttccctggaa	ggagattctc	tagagccctt	cccactggag	tccaggggtg	2580
ctggtgaaga	gcactggggg	ctgcaggctg	ggtggacccc	aagcttagtt	ggatcctggg	2640
caaatacact	cctttcttta	aattcagttt	ccccctttgc	cgggcgcggt	ggctcatgct	2700
tgtaatccca	gcactttggg	aggccgaggc	ggtcggatca	cgaggtcagg	agatcaagac	2760
cactcctggc	aacacggtga	aacccccatc	ctactaaaaa	tacaaaaaat	tagctgggtg	2820
tgggtggtgtg	tgctgtagt	cccagctact	caggaggctg	aggcaggaga	atcgcttgaa	2880
cccaggagggt	ggaggttgca	gtgagccgag	atcgcacacc	tgcgctccag	cctgggtgac	2940
agagcgagac	tccgtctcaa	aaaaaaataa	aaataaaaaa	taaactcagt	ttcccccttt	3000
gtaaaatagg	atgatgatac	ttgcacctca	aggtgctggg	aggattcact	gtgagcatgt	3060
gagaagcaga	gggcagactg	tgggtggctg	tgggccaggg	cagagccttg	gataaacttt	3120
gacttaagtc	tcatcattta	aaagttagg	ccaagcacgt	gactcacatc	tgtgatccca	3180
gcactttggc	aggctgaggc	aggaggatca	ctggaggcca	ggagcttgat	accagcctgg	3240
acaacatagc	aagaccccat	ctctaaaaaa	atataaaaaa	tagccaggca	tagcagtggt	3300
cacctgtagt	cccagctact	caggaggctg	aggtgggagg	atcacttgag	tctgggagggt	3360
tgaggctgca	gtaagctgag	gtcacgccac	tgcagtcaag	cctggcggac	agggtgagac	3420
cctgactttt	tttttttttt	tttttttttt	tttgtgagac	agagtctcgc	tctgtcggga	3480
agctggagtg	cagtggcggg	atcttggtct	actgcaacct	ccgcctcttg	ggttcaggag	3540
caagtctcct	gcctcagcct	cctgagtagc	agggactaca	ggcactcacc	accacgcccc	3600
gctaattttt	gtatttttag	tagagacggg	gtttcatcgt	gttggccagg	atggtctcaa	3660
tctcctgacc	tcgtgatccg	cccgccttgg	cttcccaaag	tgctgggatt	acaggcgtga	3720
gccaacgcac	caggccagag	accctgtcct	ttaataaaaa	taaagatagc	atttctggcg	3780
tgtcttcaga	aattgccgtg	tggccagcat	aaaggggggg	agcatectgg	gccacgtctc	3840
ccaccctctc	aggccgggtg	tccaccggga	agtcctccct	caccgcctcc	aagaccttgc	3900
ctggcatttg	agtatggaac	cttctcagat	tttgccaca	ggggccgggg	agaagcaaat	3960
cctcaccatg	ttaggagggt	tggggaaact	gaggccccgg	gagcagaaac	ctgaggctgc	4020
agagggccag	ggacttgtcc	ccagctgcct	ggggcttcta	ggcagaggct	ggaagtatgt	4080
ccgggctctc	actctggccc	agagggctca	aggggtaaat	cccttggttc	ctctctctct	4140
ttccacacca	gatccggacg	ctgcggctga	agatcttggc	agacgcagca	gctgaggggg	4200
tcccggtgcg	tggggcccg	aaccagctgc	gcatgtacct	gaccatggcg	gtggcgggcg	4260
cgcagcctat	gctcatgtac	tggctcacct	tccacctggt	gcggtgagcg	cgcccgctga	4320
acctcccgct	gctgctgctg	ctgctggggg	ccactgtggc	cgccgaactc	atctcctgcc	4380
tgcaggcccc	aagggtccacc	ctgtctggcc	acaggcaccg	cctccatccc	atgtcccgcc	4440
cagccccgcc	cccaacccaa	ggtgctgaga	gatctccagc	tgcacaggcc	accgccccag	4500
ggcgtggccg	ctgttacaga	aacaataaac	cctgatgggc	atggcgtgga	cagcctctcc	4560
ttggcctcgc	gcacgaatgg	gcggggccag	cgctgggcag	ggggcaggga	gctggggacg	4620
ggccagagta	ggcaccacgc	tgaccagtcg	cagaaggcag	agaggaaggt	ttaatgagcc	4680
ctgtccaggg	cccttcagtg	gggagcctcc	ttcttcttgc	ccttctcctt	cttgccttcc	4740
tccttcttct	tcactttggg	cttcttggcc	ttgcccggga	tgctctcgtg	ctgcttggag	4800
ccagcagcgt	gggactgtgg	ggccgagggc	agggatggga	gagaagagat	ggttctgggc	4860
tggaaagcag	acagggggag	cactccccgc	accctccccg	ccagccccag	tgcggggacg	4920

cctctctggg	gtgcagggca	cgtgcttggg	gacgctggcg	agagcccctt	accttcacat	4980
ccgtgtccga	atcgtctggag	ctgctgctgg	agtgcgaaga	gctgtggtgt	ccttgctgga	5040
tggaggtgcg	gcagtgaggc	ggcgcccctt	accagccccc	ctgaagtgg	aggcctaagg	5100
caggaccctg	gggtcagggg	caacccacgc	cttcccgcgc	ctccgcagcc	ggtgatgagg	5160
cgacttacct	ttggaccctg	acctgcccct	tgcctccgac	cgccctgaa	ctttgtgggg	5220
actgagcttg	ggatctcccc	cgtggcccg	ccccacaccg	ggcttctggg	agggtgggctc	5280
cagggctgtg	gagagaagtt	gggtggttgg	tgcaggcagc	ttctgggctt	gagtccggcc	5340
ccctgcacct	ccagtcacac	ctccccagga	gctcacctgc	tcccaggctc	aactccatgg	5400
cggtaagaga	agttgggtcc	taaggccaag	ggcgccctgg	ccctgcagag	gagcggagca	5460
gggggaggag	cgctgagacc	tgcccgttgg	aggaatgctg	agacgcccc	cccaacctct	5520
gtcctgggtc	tcagccctga	ctcattgccc	ggcaccaccc	aggatttctt	ctgtgagaag	5580
tgggggagat	ggacaggtga	ctgcttccgc	cagccttggg	gcctcagggg	aggccgactg	5640
aggggggctc	tgtggatggc	attcggggag	ctacaggttt	ccccaaaag	ctcagatgct	5700
cgttcttgaa	gagggaggtg	ctgcccctgc	cttctctgct	accgcgacaa	tacagcttcc	5760
tccgcggcgc	tttaacacgc	agggcgctgc	tgccaggggc	gtcccgtgtt	ctaactcgct	5820
cccacagccc	ctccggcttg	gtgagcagcg	tctgaggggt	gaggggcata	gacttggagc	5880
cagcctgtcg	cactagatgc	cagctgtgtc	acttagcagc	aaggtgacct	cagcaaagtt	5940
gttttacctc	tgtgcctcag	tttctctatc	tgtaataaac	agctacccat	gggattgatg	6000
tgaaagtcag	aggagttaat	ttcctagaat	ggtgtctggc	atgaagtact	gataatgtgt	6060
tgggttttta	aaaaataaaa	ggtaggtgtt	ttagggcagt	catggtggct	cacgcctgta	6120
atcccagctg	ctccggaggc	tgaggcacga	gaatcacttg	aacctgggag	gcagaggttt	6180
cgggtgagcca	agatcacacc	actgcactcc	agcctgggcg	acacagttag	actccgtctc	6240
aacaaagaaa	aaaatatata	gatataaaa	ataagtgtca	ggcggggcat	ggtggctcac	6300
gcccagcact	ttgggaggcc	gaggcaggtg	gatcacctga	ggtcaggagt	tggagaccag	6360
cctggccaac	atggtgaaac	cctgtctcta	ctaaaaatac	aaaatttagc	cagccatggt	6420
ggcaggtgcc	tgcaatccca	gctacttggg	aggctgaccc	aggataatca	cttgaacccg	6480
ggaggcagag	gttgcagtga	gccgagattg	cgccattgca	ctccagcctg	ggtgatggag	6540
cgagggtcca	tctcaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaa		6585

<210> 5224

<211> 246

<212> DNA

<213> Homo sapiens

<400> 5224

gaggcaggca	gatcacgagg	tcaggaaatc	gagaccatcc	tggccaactt	agtgaacccc	60
catctctact	aaaaatacaa	aaaaattagc	tgggcatggt	ggcaggcgcc	tgtaatccca	120
gctactcggg	aggctgagac	aggagaatgg	cgtgaacccg	ggaggtggag	cttgcaagtga	180
gccgagatcg	caccacggca	ctccagcctg	ggcgacagag	cgagactctg	tctcaaaaata	240
aataaa						246

<210> 5225

<211> 1918

<212> DNA

<213> Homo sapiens

<400> 5225

aggacctcca	caaaaagtac	tcgtacatcc	gcaagaccag	gcctgacggc	aactgtttct	60
atcgggcttt	cggattctcc	cacttggagg	cactgtctga	tgacagcaag	gagttgcagc	120
ggtgagaagg	gtgggcactg	ggcaccgagg	cagggtgggtg	tctacctcct	ccccgggcga	180
gtaggatgtg	tctcgagtag	ggtgtctccc	tccttcccgg	gcgatgggct	ggactctggc	240
cttgcaaggcg	gggcagtgct	gtctcggccc	tggcgtctgg	gctggtcgag	gagcccatgc	300
tggcccacct	ttccatccca	ccccaggtt	caaggctgtg	tctgccaaga	gcaaggaaga	360
cctggtgtcc	cagggcttca	ctgaattcac	aattgaggat	ttccacaaca	cggtagagcc	420
tgggtgcctgt	cttgggctgg	gccatggggg	aggggttcac	ctggtagagga	ccacccatct	480
cctccctgtc	atcttgccct	ttctccctcc	gtggtgcag	ttcatggacc	tgattgagca	540
ggtggagaag	cagacctctg	tcgccgacct	gctggcctcc	ttcaatgacc	agagcacctc	600
cgactacctt	gtggtctacc	tcgggtgct	cacctcgggc	tacctgcagc	gcgagagcaa	660
gttcttcgag	cacttcacgc	aggggtggacg	gactgtcaag	gagttctgcc	agcagggtgcc	720

gtccccctcc	cctttactct	cggccggggg	agtgcagtgg	gccacagggc	ctggggcggg	780
gtgcgagac	cagggcctga	ccggcacctg	tgccacagga	ggtggagccc	atgtgcaagg	840
agagcgacca	catccacatc	attgcgctgg	cccaggccct	cagcgtgtcc	atccagggtg	900
agtacatgga	ccgcggcgag	ggcggcacca	ccaatccgca	catcttccct	gaggggtccg	960
agcccaaggt	ctaccttctc	taccggcctg	gacactacga	tatcctctac	aaatagggct	1020
ggctccagcc	cgtctgtgcc	ctgctgcccc	cctctgccag	gcgctagaca	tgtacagagg	1080
tttttctgtg	gttgtaaagt	gtcctatttc	accccttct	tcctgtcaca	tgaccccccc	1140
cccatgtttt	attaaagggg	gtgctgggtg	tgagccgtgt	gtgctgttcc	ctgctctgct	1200
gcccgcctgg	ctgctctgtc	tgctgcccc	tccccccagg	tgggtcccc	tgcttttcac	1260
ctatctactc	ctgagcttcc	ccaacaggag	caggtttgag	ggggcaggcc	tcttgagggc	1320
ccctcctgct	tcgttggtt	ctgcttccct	cccttcttag	ctggctcagg	ggcttctatg	1380
ggatcctgga	agttccttag	ggacttgccc	aggggtcccag	ggccacccac	acttcatctg	1440
ctccctcata	ggccccacct	ccacgtccc	gctgggcccc	agaccccagc	ttcctgccct	1500
ccaccgggag	tctgcatggt	tgggagtcct	gggtggagg	gcctttgtga	ggctggaccc	1560
ggctcagggc	aggtggagga	gctgggcctc	ccacagggtg	cccgggcagt	gccatcctgg	1620
tgggggaggg	cagccttcaa	acgtgtgggg	tctacagtcc	tcagggtctag	gcagggtctg	1680
cggttctcca	ctcccccatc	cgccccaggc	cccctgcctg	tgctgcctt	gcacccccctc	1740
tgcttggggc	acgggtgtctc	tgcattgcct	gcctttttgc	cttcacctct	tttcttcccc	1800
gccccctgca	cattcggggt	ctcagcccc	aggctgtgag	ctccttgggg	gcaggccctc	1860
aataaatgtg	aactgctgct	gccgcctctg	ccgtccgcct	gtgcctctgc	ccgcctgg	1918

<210> 5226

<211> 1920

<212> DNA

<213> Homo sapiens

<400> 5226

aggacctcca	caaaaagtac	tcgtacatcc	gcaagaccag	gcctgacggc	aactgtttct	60
atcgggcttt	cggattctcc	cacttgagg	cactgctgga	tgacagcaag	gagttgcagc	120
ggtgagaagg	gtgggcaactg	ggcaccgagg	cagggtgggtg	tctacctct	ccccgggcga	180
gtaggatgtg	tctcgagtag	ggtgtctccc	tccttcccgg	gcgatgggt	ggactctggc	240
cttgccaggc	ggggcagtg	tgtctcgcc	ctggcgctctg	ggctgggtcga	ggagcccatg	300
ctgggccccg	ctttccatcc	cacccccagg	ttcaaggctg	tgtctgcca	gagcaaggaa	360
gacctgggtg	cccagggtt	cactgaattc	acaattgagg	atttccacaa	cacgggtgagc	420
cctgggtgct	gtcttgggt	gggccatggg	ggaggggttc	acctgggtgag	gaccacccat	480
ctcctccccg	tcactcttgc	ctttctccct	ccgtggctgc	agttcatgga	cctgattgag	540
cagggtggaga	agcagacctc	tgtcgccgac	ctgctggcct	ccttcaatga	ccagagcacc	600
tccgactacc	ttgtggtcta	cctgcggtg	ctcacctcgg	gctacctgca	gcgcgagagc	660
aagttcttcg	agcacttcat	cgaggggtga	cggactgtca	aggagtctctg	ccagcagggtg	720
ccgtccccct	cccctttact	ctcgccggg	ggagtgcagt	ggggccacag	ggcctggggc	780
ggggtgcgga	gaccagggcc	tgaccggcac	ctgtggcaca	ggaggtggag	cccatgtgca	840
aggagagcga	ccacatccac	atcattgcgc	tggcccaggc	cctcagcgtg	tccatccagg	900
tggagtacat	ggaccgcggc	gagggcgga	ccaccaatcc	gcacatcttc	cctgagggct	960
ccgagcccaa	ggtctacctt	ctctaccggc	ctggacacta	cgatatactc	tacaaatagg	1020
gctggctcca	gcccgtgct	gcctgtctgc	ccccctctgc	caggcgctag	acatgtacag	1080
aggtttttct	gtggttgtaa	atggctctat	ttcacccct	tcttctgtc	acatgacccc	1140
cccccatgtt	ttattaaagg	gggtgctggt	gggtgagcgt	gtgtgcgtgt	ccctgctctg	1200
ctgcccgcct	ggctgctctg	tctgctgccc	cctccccca	gggtgggtccc	cctgcttttc	1260
acctatctac	tcctgagctt	ccccaacagg	agcaggtttg	agggggcagg	cctcttgagg	1320
gccccctctg	cttcgttggg	ttctgcttcc	ttcccttctt	agctggctca	ggggcttcta	1380
tgggatccctg	gaagtctctt	agggaacttg	ccagggtccc	agggccaccc	acacttcatc	1440
tgctccctca	taggccccac	ctccacgtcc	cggctggggc	ccagacccca	gcttctctgcc	1500
ctccaccggg	agtctgcatg	gttgggagtc	ctgggtggag	gggcctttgt	gaggctggac	1560
ccggctcagg	gcagggtggag	gagctgggcc	tcccacaggg	tgcccgggca	gtgccatcct	1620
ggtggggggag	ggcagccttc	aaacgtgtgg	ggtctacagt	cctcagggtct	aggcagggtct	1680
gccggttctc	cacctcccca	tccgccccag	gccccctgcc	tgtgcctgcc	ttgcaccccc	1740
tctgcttggg	ccacgggtgc	tctgcattgc	ctgccttttt	gccttcacct	cttttcttcc	1800
ccgccccctg	cacattcggt	gtctcagccc	ccagggtgtg	agctccttgg	gggcaggccc	1860
tcaataaatg	tgaactgctg	ctgcccgcctc	tgcgtccgc	ctgtgcctct	gcccgcctgg	1920

gggtagcctg	aggcgggtg	ggcgggagtg	agtcctaggc	tctggccccg	ccactcccc	960
tgtccgcccc	ggccccctccc	ggcgtctggg	tccaccgccc	actcctggtc	cttgcctttc	1020
ttccagactc	accaaacacg	ccggtggaga	tgcaggggaa	cgcctgggcg	gggaggggtg	1080
agaggggggt	ggaacattgt	cactgcgccc	cgcctcccgc	cctcccccg	gggccgtccc	1140
tcaccaccga	gcggagccgg	tgtccagca	gcaggtccag	actgctcagg	tagcagctgc	1200
ggagctcggc	agcctggctg	gcgtgggct	ccccgtaggc	gatgggcccc	actgtgtgga	1260
tgacgtctac	ggggggcgac	ggggtcagac	cggcgggggt	ctacgcggtc	ctcagctccc	1320
tcgcttcccc	ctgccggcct	gggcagaagg	gggcaggaaa	cacctttccc	cccaagcgct	1380
gagcctcctc	cgcgaaggcc	ccccaccctg	tgggccccct	cgagccccga	tccgcacgcg	1440
cacagagccc	cgcgccccct	ccccacatct	gtatgggccc	ggctgagacc	cgagcgcgag	1500
tgtgggcgcg	aaggcggtgc	ccccagctc	catcctcagc	ctccacgcac	ggtctcccc	1560
atgtgcttcc	tggggtgtgc	ggggtggggg	cggggtcttg	gcccttaagg	ttaagaaggg	1620
ccccctgagg	agttccccag	cactcctgtg	ggggcgcgac	ccctgatgtc	ccagtgcac	1680
acgggcgccc	tgtctgcgcc	ccacagctgg	gggcgcgtcg	gggactcaca	cttggccggg	1740
agccgatagc	cgcgggtgat	cttggccttg	ccagtcttac	agctctgcag	ggtccggcac	1800
tcgtcggtaa	gcagggggcc	ggcggcccga	tgaatgc			1837

<210> 5229
 <211> 491
 <212> DNA
 <213> Homo sapiens

<400> 5229						
ccactcaact	gttaaggccg	gagcctgtgc	atgattaagg	ttattctccc	tctctcgcct	60
ctcgccaagt	ttatgcactc	ttccccctgtg	gaccatctct	ttcgacaaat	ccagcaaaac	120
ccccccccca	tcctggaaaa	tttcttcttc	aatcggggtt	aagtcgggga	tctagagagg	180
tcgggtgtga	aaggaaaagga	ccttcgggcg	ggaaccaata	ccaagctacc	ctcctgggtt	240
tcgttggtta	tatacatggg	agggggaaaa	tggctctgtat	ttttaaaca	gaagatgtcc	300
tgccgtttct	gcttctgttt	ttcctttttt	cttttttttt	ttttttaaca	gccaattctt	360
ttgaagggag	atagccagcc	aattttccat	ttctccttgc	ctacggagct	catgcaaact	420
tccctacgct	agccggctgg	ccctgtgcaa	ccttcaactac	cacctcccgc	caacccccctc	480
cgcacctact	t					491

<210> 5230
 <211> 491
 <212> DNA
 <213> Homo sapiens

<400> 5230						
ccactcaact	gttaaggccg	gagcctgtgc	atgattaagg	ttattctccc	tctctcgcct	60
ctcgccaagt	ttatgcactc	ttccccctgtg	gaccatctct	ttcgacaaat	ccagcaaaac	120
ccccccccca	tcctggaaaa	tttcttcttc	aatcggggtt	aagtcgggga	tctagagagg	180
tcgggtgtga	aaggaaaagga	ccttcgggcg	ggaaccaata	ccaagctacc	ctcctgggtt	240
tcgttggtta	tatacatggg	agggggaaaa	tggctctgtat	ttttaaaca	gaagatgtcc	300
tgccgtttct	gcttctgttt	ttcctttttt	cttttttttt	ttttttaaca	gccaattctt	360
ttgaagggag	atagccagcc	aattttccat	ttctccttgc	ctacggagct	catgcaaact	420
tccctacgct	agccggctgg	ccctgtgcaa	ccttcaactac	cacctcccgc	caacccccctc	480
cgcacctact	t					491

<210> 5231
 <211> 776
 <212> DNA
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (709)
 <223> n equals a,t,g, or c

```
<220>
<221> SITE
<222> (738)
<223> n equals a,t,g, or c
```

<400>	5231						
tacaacgtcg	tgactgggaa	aaccctggcg	ttacccaact	taatcgccct	gcagcacatc		60
ccccttttcgc	cagctggcgt	aatagecgaag	aggcccgcac	cgatcgccct	tccaacagct		120
tgcgcagcct	gaatggcgaa	tggcgccctga	tgcgggtattt	tctccttacg	catctgtgcg		180
gtatttcaca	ccgcatactg	tgcactctca	gtacaatctg	ctctgatgcc	gcatagttaa		240
gccagcccg	acacccatcg	acaccgcgtg	acgcgccctg	acgggcttga	ctgtccccg		300
catcgcgtta	cagacaagct	gtgaccgtct	ccgggagctg	catgtgtcag	aggttttcac		360
cgtcatcacc	gaaacgcgcg	agacgaaagg	gcctcgtgat	acgcctattt	ttataggtta		420
atgtcatgat	aataatggtt	tcttagacgt	cagggtggcac	ttttcgggga	aatgtgcgcg		480
gaaccacctat	ttgtttattt	ttctaaatac	attcaaatat	gtatccgctc	atgagacaat		540
aaccctgata	aatgcttcaa	taatattgcc	aaaggaagag	tatgagtatt	caacattttcc		600
gtgtcgccct	tattctccctt	attgaggcat	tgactcgttc	tgtttttgct	caccagaaaa		660
cgtgtgtgaa	agtaaaaagt	gctgaagatc	aggtgggtgc	acgagtggng	tacatcgaac		720
tggatctcaa	cagcggtnag	atcctcgaga	ggtttcgccc	ccgaagaacg	tttttc		776

```
<220>
<221> SITE
<222> (741)
<223> n equals a,t,g, or c
```

```
<210> 5233
<211> 150
<212> DNA
<213> Homo sapiens
```

<210> 5234
 <211> 845
 <212> DNA
 <213> Homo sapiens

<400> 5234
 cccgtcgttt tacaacgtcg agactgggaa aaccctggcg ttacccaact taatcgccct 60
 gcagcacatc cccctttcgc cagctggcgt aatagcgaag aggcccgac cgatcgccct 120
 tcccaacagt tgcgcagcct gaatggcgaa tggcgccctga tgcggtatct tctccttacg 180
 catctgtgcg ggatttcaca ccgcataatgg tgcactctca gtacaatctg ctctgatgcc 240
 gcatagttaa gccagccccg acaccgcgca acaccgcgtg acgcgccttg acgggcttgt 300
 ctgctccccg catccgctta cagacaagct gtgaccgtct ccgggagctg catgtgtcag 360
 aggttttcac cgatcatcacc gaaacgcgcg agacgaaagg gcctcgtgat acgcctatct 420
 ttatagggtta atgtcatgat aataatgggt tcttagacgt cagggtggcag ttttcgggga 480
 aatgtgcgcg gaacccttat ttgtttatct ttctaaatac attcaaatat gtatccgctc 540
 atgagacaat aaccctgata aatgcttcaa taatattgaa aaaggaagag tatgagtatt 600
 caacatttcc gtgtcgccct tattcccttt tttgcggcat tttgccttcc tgtttttgct 660
 caccagaaa cgctgggtgaa agtaaaagat gctgaagatc agttgggtgc acgagtgggt 720
 tacatcgaac tggatctcaa cagcggtaag atccttgaga gttttcgccc cgaagaacgt 780
 tttccaatga tgagcacttt taaagtctct ctatgtggcg cggattatc ccgtattgac 840
 gccgg 845

<210> 5235
 <211> 15696
 <212> DNA
 <213> Homo sapiens

<400> 5235
 gacctttggg gctgcagctg gctgagcgcc gaggggctgc ggaggcagtg accttcttaa 60
 ctgagccacc ccacgccctg ctccgggcct gcctgcatct cccacctcct ccccgagcgt 120
 gcctgccccct ctccggagcct ggggtcactc agaccaccag ccaagagcct tcccttgaag 180
 tccccaaagca agcactgcaa ttaggaaaga gaaaaagcag cgtgcccagc ctggaagggc 240
 atctgtttgc cccgctagca acccttttat atctagcagg gctcttccag tctgcagca 300
 cgggccccca gctatcagcg gtgcaggcag tgctgtggca tcccaggctc cgggcagctc 360
 cgttctcatg ctgaaagtgg gtctccggcc ttagcacaca caccttgagg gtcttaagaa 420
 ccacattccc tcatagtaga aagtactaga aaaagcgaca ctgccatcat catcccaagg 480
 caggctgcta ctgcctttgc tgaccccccg ggtggcctca cgggtggggac aaagctgcca 540
 ggagccacag cagccacagc tggggctttg caccagcctg gcttgagact gagcagtttg 600
 caggggggtgg ggggtgcaaa aaacaagcaa acaggctgct gctgcctcca gctgcccacc 660
 acaggcctgc cccaggcacc tggggctctg agggccctgg ggaggctggg cccagcagct 720
 gcccctggag aacacagaca aaggacttcc ccgcagggaa ctgtgcccta tggaggatc 780
 agacagggct gggaacagcc acagaggctg cgtgcctatg gcacagccct tctccgccc 840
 cacactcccc ctgggtcctc agggccacc cagcgccggg ctgcagagga agcggggctg 900
 gggaggctgc aggcacaga gacactgggt gtggcgagcc cggccgcccgg gccccgtgct 960
 ctcaggctag cccaggctgt ggaggctggc aggtcaggt cgggtgtgag acgtgccgtg 1020
 gctgcgctca gtccagcggg gaggagccgt tcagcccggc ctcccagga agccatatcc 1080
 ccactacccc ggtaagagaa ccttgctgct ccctttccat gctctcctag gacacgagcc 1140
 caggaacccc agaccaggg ggaggaagg tggaggggccc ccaggggtca ccgtgtgcac 1200
 cagggggcgt gaggggcccgg ggcattcagc tcagctctga accggggaag ctggcacggc 1260
 aaggactgcc tcagggtgac ggccgtgaga ggggacgggt caggagcctt cccaagcctt 1320
 ctctcagcc cgacacccat ggccatcgga ggctaggatg ccagacacag ccatttgtag 1380
 aatcaggca cagtgactgc agctcacgtc cagccaacca agcatggggc cgcagctcag 1440
 gaagtccctt cccgccacac cacagcctaa ttcttactgg gacggaggca actcggctac 1500
 gctgggcagg acgacaaaca cgagacgcca ctgtggaatg agcaacttcg gagcacgggg 1560
 tgacttgctt gggaccgtgc ccacgtgaca gccccttatg cagaggagga aagagaagcc 1620
 ccgagtggga ggggaacctg tccaaagtca cacggtgtgt gggtgacaca gctgggggtg 1680
 gtcgaggctg gcccctgagg cccatgctcc ctgaacgtg gagaccactg tcggctagca 1740
 gcggtctctc ggggaaggcct ggtctccacc ctcccagcct agcctcgcg accctcgtcc 1800
 tccccacatc ggacctgctc acctgcctgg accctgggct gccagatgca ggaagcatca 1860
 aacccccag cctcgtgggt gcggggcagg gcgcaggcag cacagcttag atgccctgg 1920

ttgtccctct	tgtctcctgg	gaagagcttg	ctccccccca	gctctcctgc	cactggcctt	1980
tcaggggttg	gctgggcccc	gagtgccttt	tagtcgcttc	tcacgggtgg	ctgatggctc	2040
aaccaggtcc	caaacggggc	cagtgcacct	gccgcctgcg	ccccagctca	ggccccact	2100
gcaccagcaa	tgctagaaaa	ccaagccaat	aaaagtgatt	tcttttttca	ttaaaaaacc	2160
atttatagtc	atttcatggt	ggttggaat	cacagaaatt	aggcaggaaa	aaaaaaccca	2220
agggaacaaa	tacaaacagc	acagcgcttc	ccacagttct	ctgctctgct	ctcctgcgag	2280
ccggggaagg	agagggggcag	cctgagctcg	ggcgggggct	gggcctgggt	gccccgggct	2340
cagctctcct	cgccagggc	ctccgagctc	ccccgtgcc	tctcgcgctc	ctgccggctc	2400
ctcccaggcc	tgccaggtc	gggacccttc	cgtacgctgc	tggtgggaac	agcaaaggcg	2460
gtgtgaggat	gcccctccgc	ccctgccctg	cctgtagggc	ggttggtgg	gatgggcacc	2520
gaggagtgt	cccccggtgt	ggcacctgag	gctcagtgct	cgccctccta	tctgcctgtc	2580
ttctgccact	agagaccaca	accatctcca	gggtccccac	gctggcgcca	gccaggcata	2640
gcacaaggca	gctgctgggt	aagtgcagta	ctccactgag	ccttgtagca	gacagcagcc	2700
cacagtgatg	ggcacaggca	ccgtcagata	gccgggtgcc	cgtgctcggt	gcctacctac	2760
ctggggccacc	ctggaggctc	ggcaagaagc	caccttccca	ggaggccagg	ggcaggcagc	2820
tcaaagccct	ggagctgcct	ctctgtaggg	gccgcgggaa	gtgccagcca	gcggggcccct	2880
ggggtcagct	gtgaagggtg	gaggcccag	taaggacgac	atccctggga	cccatcccag	2940
agggactggc	acaggaggag	cggctcggac	ccagggtgcg	cgctcacacc	ctgccgctca	3000
ggagtccaaa	ccccacggcc	cgggacactc	actcgtgcag	gtcttcagag	gagccacacc	3060
ttggcccttc	ctccgagctc	cgaccctcct	cgtgctcctt	gtcctctgcg	ctctccccct	3120
tctgtgatgt	ggcctcgcca	ttcactgggg	ctgagagatc	tggtggggac	agaggggtca	3180
caggacactg	ctgggctcca	gctgggcacc	ccagaaccct	tgctgtcaa	ggactggacc	3240
agggggccaag	ctgagcgccg	tggtgacac	atgcccatcc	acctggaccc	cagcacctgc	3300
tgtccagtct	gcaagctcct	gacatgggat	gctgcagcca	gccccagccc	gagccacact	3360
ggcctgcaga	actggggggc	caagaaatga	gggaacgtcg	gcagccctga	gaaaagccca	3420
cagcagcctg	ggaaagacaa	aggaagacaa	ggtcgggcac	gggggctcac	aatcccagca	3480
cgtgggaggc	cgagacgtga	ggctcacttg	agcccaggag	ttcaagacca	gcctgagtaa	3540
catgccagca	accctgtctc	tacaaaaaat	acaaaaatta	gcacgtcctg	gcagggcgca	3600
gtggctcacg	cctgtaatcc	cagcactttg	ggaggccgag	gagggcggat	catgaggctc	3660
agagattgac	accatcctgg	ataacacggt	gaaaccccat	ctctactaaa	aaatacaaaa	3720
tattagcctg	gtgtgggtgt	gggtgcctgt	agtcccagct	cctcgggagg	ctgaggcagg	3780
agaatggcgt	gaaccaggga	ggcggagctt	gcagtgcgac	aagatcacgc	tactgcactc	3840
cagcctgggg	gacagagcaa	gactccgtct	caaaaaaaaa	aaaaaaaaaa	aaaaaaatta	3900
gcagggcata	gtggtgtagg	cctacaatcc	cagctcctca	ggaggctgag	gtggaggatg	3960
gcttgcgccc	aggaagtcaa	ggttgccagt	agctgtgatt	gtaccactgc	actccagcct	4020
gggggacaga	gcgagacccc	atctcagaaa	aaaaagaaaa	aagaaaaaaa	agacactagc	4080
cttcggctgc	ccccggggcc	gcaaagcccc	atcccaagct	cgcccatccc	atctccaaag	4140
ggctgctctg	agcacctgta	atggggccat	gtcagcccag	tagccccaca	gccagcagcc	4200
ccgaggggtca	cacctcatct	cctgtcggcc	caccaggcaa	gcaagggcac	ctgaggcctc	4260
cgcccccgag	cctccaccga	ctgcctctct	gaacaatgcc	cccactcttt	gcccccgctg	4320
cacagagcca	ccccctctct	tgggcgtccc	agggtgggag	acggtggagg	cgtgtgctgt	4380
catgcactgt	ccccgtcacc	cctctggcgt	gagccccaag	ttacctgcat	gctggctgcc	4440
tggcacacgg	taggacctga	atgccccctc	ctggctgcct	cagggattaa	agccgggtct	4500
gcacggagac	cccaacagga	catgcactc	tggcaggttt	ggggcagaga	gtagactgtg	4560
actccccctt	tggaaatgtt	tgcaaagcat	ctgtttcttc	agctgaggag	actgagggtac	4620
agggccacc	ccaccggccc	ctcaccggtg	ctgggcttgt	cctccgcctt	ctcctggggg	4680
gcctcctccc	cgccagctc	ctccccggcc	agctcctccc	cgccagctt	ctcctcgccc	4740
ttctccttct	ccatcccagc	cttgttcact	ttctgcaccg	cctcgatctt	tgggcccagg	4800
accgcgact	tgagccgggt	atagacttct	gctgccttct	ccattacgtc	cttgttctgt	4860
ttgtaacggc	gaatctggcc	accaagagaa	gaggcctggc	tcaccaaggt	gcagcggccc	4920
tagccccggc	tctgaacccc	tgcggccagc	aatgcgcccc	tcccgagcc	cctccccgga	4980
gcacagctct	gtgcagcagg	catttctttt	tttttttttg	agacagagtc	tcgccctgtc	5040
accaggcta	gagtgacgtg	gcgcgatctc	ggctcactgc	aacctccgcc	tcccagcttc	5100
aagcgattct	cctgcctcag	cctcctgagt	agctgggatt	acaggcgtgc	gccaccacac	5160
ctggctaatt	tttgtatctt	tagtagagat	gggttttcac	catgttggtc	aggatgggtc	5220
tgatctcctg	acctcgtgat	ccgcctgcct	cagcctccca	aagtgcctgg	attacaggcg	5280
tgagccacca	ctcctggcaa	gcaccaggca	tttctaccca	gcagcccacg	gcctcctcgc	5340
tgaccagggg	ctgtcccgcg	aggaacctgc	tgggggcctg	ggctcccggg	caggcacttg	5400
ctcccagctc	ccccgactgc	accctgcgcc	tctgattccc	ccgccatacc	ttcttcaagg	5460
tggccaccac	gtctgtgttc	ttctggagga	tctgagaggt	cacctgcagg	gttcccagct	5520
cctctagggc	attcaggcac	ctcttcacgt	cctgcagggt	gggggtgggag	tgagggagac	5580

ggcctggcca	agggatcccc	aggggtccca	gggccccgat	gggtggagga	agacatcctg	5640
ggctctcctt	gaggggagct	gtatctgcag	aacagctccc	ctcagccccc	gtccagttga	5700
cggggaactc	cagggatagc	cagatacttg	gggtcccagg	tacgtggggg	ttggtcctgg	5760
gggcctccac	acaccacctg	ccgggaaagc	tgggtgctgc	atgtcaggac	cagctcccc	5820
agggcccttg	gccaggagac	cccatgcgct	cactagcaac	cggaaacagac	tcctggccca	5880
cccaactgca	ggaccccggc	tttgccctcag	tttcccgaga	catctaaggg	agcctggcag	5940
ggaggtggca	gcggggactg	cttggtcac	aggccctgag	ggtcttaccg	ggctgtcgac	6000
ctttagggca	aacttgatct	cactgtgcag	cttctgcagc	ttctcctcca	cggagggtct	6060
tgggccagga	gagagagcac	cgtgtgggccc	caggcagggc	cacagggggc	cagctgttca	6120
agggcaggag	cctgagagcc	tctggaggat	ttgtcatggg	ggccccagggt	ctgcaggctc	6180
agccccacc	cctggaggca	ccgccggcca	ggccggccga	ggatgtgctg	agcacctct	6240
ctagggacag	gcgggacagg	ccagccacgc	cacggctgtc	cccgttcccc	tcagtgaact	6300
cagtgtgggc	agtgtctggg	agccaggcct	cacctttctt	cttctctacc	ttcctgtcca	6360
tcgagaagcc	ctcggaccgc	ttccgggtcc	gctccacctt	cacgggcctg	tggagaagtg	6420
ctccccctcag	tcggggccccg	tcaccggcac	tctgccactg	aggggctggc	gcctgaaggg	6480
gtggacccaa	acccactgca	aaggaaacct	ttgggaggcc	ctgggagcta	agccgggaaa	6540
cgggaggcgg	ggaggccctg	ccacagccta	ggcctagggc	agaccagggc	agccacaggc	6600
tcgagctgcc	caaagataca	agccttttcc	cgagttctca	tgaatccca	ggattctttt	6660
cctcgttcac	atggccaagg	gctggccttg	tctaccagag	tcagcgagct	aggaaaaggc	6720
cctcaagggg	gacacgcgtg	caggagagag	gcccattgct	gaggctcggt	gccatgtgct	6780
gctctgtacc	ccgccactgc	cataccggcc	tgccgaattc	tcattgggcag	gtttgccccac	6840
tcaaggccat	ttagaaagtg	ggctggggga	ccaagcacgg	tggctcacgc	ctgtaatccc	6900
agcacttttg	gaggccgagg	cggggggatc	atgagtttag	gagatagaga	ccatcctggc	6960
caacacggtg	aagccccgtc	tctactaaaa	atacaaaaaa	ttagccgggt	gtggtggcac	7020
acacctgtag	tcccagctac	tttgagggtc	gagctaggaa	aatcgcttga	acccaggagg	7080
cagaggttgc	agtgcgtga	gatggcgcca	ctgcactcca	gcctggggcca	cagagcaagc	7140
ccaagactct	gtctcaaaaa	aaaacaaaaa	caaaaacaaa	aacgtgggct	gcagccaggc	7200
acgggtggctc	acacttgtaa	tcccagcact	ttgggaggct	gaggcgggca	gatcacgggg	7260
tcaggagatc	gagaccagcc	tggccaacat	gatgaaaccc	cgtgtctact	aaagcaacaa	7320
aaattagcca	ggcgtgggtg	cgggtgcctg	taatcccagc	tactcgggag	ggctgaggca	7380
ggagaatcgc	ttgaacccgg	gaggcggagg	ttgcagttag	ctgagatcac	gccattgcac	7440
tccagcctgt	gcaaaagagc	aagaacaaga	ctccatctca	aaaaaaaaaa	aaaaagttag	7500
ctggggagaca	ggctctgtct	gcccaccaca	gggggaccaa	gatgcaaacc	cctaggcccg	7560
ggtgcagttt	ctccctcctc	ctctgcttgt	ggacattggg	gatggactgt	tctctgggat	7620
gggtcatcct	gggcactaca	gggcctcag	cagcgtcccc	agcctccacc	cgctccatgc	7680
caggagcacc	ccccagtcac	gacaaccaca	gatgtccccg	gacgtggccg	tgtctctgga	7740
ggcgggatcg	ccctggagga	gacccctggg	ctgggcaaag	atcccactcc	cgcagcagcg	7800
attcctacgc	agcccacaca	acccaaggac	caggaacttc	aaccgggtcc	ggctccaagg	7860
ctgaactcag	aggtggggct	gcccctgtga	ggggtgaggg	ttgtgggggtg	atgcgggggtg	7920
cggggccccc	aggggtgtgga	ggggcagagc	agggctcact	tggcttgttg	cttctcctcg	7980
ggcgcgactc	tcttctcctt	ctggccagggt	ttcctggcgg	gctctgtgct	tgaggactgc	8040
ggcttcttgg	ctgatttctt	ggcctatagc	agtcagggaag	ggcgcgctgg	agcagtggga	8100
agaggggatt	accacagacc	ctagcccatc	ccactaccag	gagatgcagc	tcgacccttt	8160
ctgtcgccct	ccacactggt	tgaaggtgct	ggggcaggat	gggagaggag	ggaggaccca	8220
gtgtccggtc	ctgagtggat	cgtgggggtc	ttggagccca	ggccccattc	agtggaggaa	8280
cagccccctt	cactcctcct	gcccagcagt	cctgggctgt	ggctgaaacg	cctcctgcac	8340
caggagtctg	gtgccctttc	tgtgatgaag	ggagtgcag	agagagaaca	cggcgctggt	8400
cgtgctttcc	caaagaagg	caggcctggc	tgaggggcac	cagcacgtgg	gccccaggca	8460
ctcagtctag	gtgagactct	ggattcaggc	cacattgcct	gaatctccac	aagggttagag	8520
ggcgtgacag	ggcccgcagc	accacacgtg	gtataggaga	gtcctgacag	tcaccaccct	8580
aggaggccct	ctacctgctc	ccacgctcac	ctgcaagctg	taccccatgg	cagccagagg	8640
gcacccgaga	gcacccgagt	gagggcctgt	ccctacctg	tccagtgcc	tccatggctc	8700
ccacctccct	cagggtcaaa	gccaaatcc	tccctgcagc	ccacatggcc	ctacccggcc	8760
tgtctgtgct	gttccccacc	gccctccttt	tccctctctc	ccctcctccc	tccactccag	8820
ccccagaggc	cacctcgctg	ttcctccagc	acgccaggcg	cagtctctctg	ggcctgtgtg	8880
tgagctgctt	ctcctgccta	gaatgtatcc	cctcccagga	gtcttcgtag	atccccctccc	8940
ttcatctgga	gcctattttt	tttttttttt	tttttttttg	agatggagtc	tcgctctggc	9000
ccaggctgga	gtgcagtggc	acaatcttgg	ctcgtgcgaa	cctctgcctc	ccaggttcac	9060
accattctcc	tgcctcagcc	tcctgagtag	ctgggactac	aggcacctgc	cacaacgcct	9120
ggctaatttt	tttgtatttt	tagtagagac	agggtttcac	cgtgttagcc	aggctggctc	9180
tgatctcctc	acctcgtgat	ccaccgcct	tggcctccca	gagtgtctggg	attacaggcg	9240

tgagccactg	cgcccagccc	attcggagcc	ttttacttaa	acccaaa'cgc	aagccttttg	9300
agtctactca	caccttcagg	gtctactcta	tttaaaagag	aaacccccca	ccccacttta	9360
ctcttctcct	tagcaccgaa	aactccggac	agcacgcact	accctcatgt	catctgtaca	9420
gctcctccct	cctttgtttt	gttttgagac	agggtcttgc	tgtgtggccc	aggctggagt	9480
gcagtggatt	gatgacagct	cactgcagcc	tccaactcct	gggetcaagc	aatcctcctg	9540
cctcagcctc	ctgagcagcc	gggactatac	aggcgcacac	caccacgccc	agctaatttt	9600
ttaaggtttt	tatagagaca	gggtctctct	atcttgccca	ggctgggtctc	gagctggact	9660
caagtaatcg	tcccacttca	gctgcccata	gtgctgggat	aacaggcgtg	agccaccaag	9720
cccggccccc	tccctcccat	gaatgtcccc	tcctccaggg	caggagtttc	tgggcccacg	9780
cactgctttc	ttgatgggtc	ccggaacctg	ggatactgcc	tcctacctag	tagatgctcc	9840
ataaacgtgt	ggagtgaagg	cagggactcc	cggcgccctc	ccggctcacc	tctctctcca	9900
gctcggcctc	gggctcggag	tcagaggagg	acgggggacc	ccggcccccg	cccttgctgc	9960
cccgttctct	gacgggctca	tcgtcctccc	tgagctcgtc	cccgtctgtg	ccgcctgtgc	10020
cccgtctcagc	ctcccccgcg	tcggcccgtc	cgcgcctccg	ctccttctcc	tccttctcct	10080
gctcccgcag	gcgcccgcag	tcctcctcct	gctctcgccg	ccgcggggcc	tcagctcgc	10140
gcctccgcgc	ctcgtccccc	cgcttccact	cactgatgcg	gtccacctcg	tcgtgtcac	10200
tggaggcgga	gggggcccgt	ggggacctcc	gttcctccct	caggagcccg	ccctgcccct	10260
cagccgatgg	aggagccgcc	agaggggacc	ccagccccag	caccacactg	tcactgctgg	10320
agctggacgg	aggccgttca	ggcttcgggt	tcgcctctcg	cggttctggg	agaggcttct	10380
ccgctacagg	aagaggagga	gggggtgacc	ttcccttcca	gggttccaag	gtgaccaggg	10440
gactgcctgg	gagcgccccg	gcaggggcca	ggccaagaga	tgtgcgagca	cgagggccct	10500
acctggcttc	ctgccccctc	gaggcttctt	cacagacaca	tcggagtcgg	aggaggagga	10560
ggaagaggag	gaggaggacg	ccgaccgcgc	catggccacc	ggctcagggt	tggccccgtc	10620
cgaatcggcc	ttggagtccg	agtcggaggc	tgatggcgcc	ttctggggag	aagcagggac	10680
aggcgtgagc	atcaggagcc	ccaccgtgag	aagcggggcg	caccaggcca	gaggaggctc	10740
ccgcacccct	gcagccgcca	ggctctgcgc	gcctcggtct	agggcccggc	tcgaatccc	10800
ctgccaccca	caaaacccac	ctccacccca	agtgaatacc	gggatcccag	gcggccctgg	10860
gcagcccggg	cagctgctgg	cccttccctt	catcttctct	agtgaaccgg	gtacatcaga	10920
agcccggtt	tcccagtggg	gacatctttt	tctttatgca	aaatcttgtg	cggaggccac	10980
atcagacaag	ctgccgtgct	ctaccgcctc	cacccgagta	ccctgccaaa	cacacacgcc	11040
acacacagac	accacacaca	caccacacac	acaccacaca	cagacaacac	acacaccaca	11100
cacacacaca	gacaacacac	ataccacaca	gataccacac	accacaccac	acacaccgca	11160
cagacacaga	caacacacac	accacgcaca	caccacacac	agacaacaca	caccacacag	11220
acacagataa	cacacacacc	acacacagac	aacacacaca	ccacacacca	cacagataac	11280
acacacacac	cacacacaga	caacacacac	accacacaga	taccacacac	cacacacaga	11340
taacacacac	gcaccacaca	caaccacaca	cacactacac	acagacacca	cacaccacag	11400
acaactcaca	cgcaccacac	acacacacca	cacacacaga	tacacaccac	acagacacca	11460
cacacacacc	acagataaca	cacaccacac	cacacacacc	acacacacac	agacaacaca	11520
cacaccacac	agataacaca	cacagaccac	acataacaca	cagaccagaa	acacacacca	11580
gacacaccat	agacacagac	acaccagaca	cacaaacacc	caacacacat	acaccacaca	11640
caccacacac	cacacacaga	caacacatac	cacacaccac	agacaacaca	cataccagac	11700
acacacacca	cacagacaac	acacacaaac	aaaacacaca	ccatacacag	ataacacaca	11760
gacaacacac	ataccacaaa	ccatacacat	ggacacacca	gacacacaaa	cacacacaa	11820
acagacacca	cacacagaca	cacaaacaca	gacacataga	tacatgaaca	gtatgcacac	11880
atggacacac	aggcaccacac	acaggcacca	catatactca	cataggaaca	cagaggcaca	11940
acacatagac	gcagaggaga	ggtacagcac	acacacacac	aggcatacag	gcacaggggc	12000
acaggcacca	gaaacacaca	cacaggcacg	acatgtgcac	acacgacaca	cacatcacac	12060
atgcacaatc	tacacacaca	ctgcacacat	acacacctac	atggtcacaa	acatgcatac	12120
acacaagtac	acacacacac	atgcacgtcg	acacacgtgc	acagagacag	aacacacaca	12180
cacaatccgc	tcatatacac	actggcacac	acctctctcc	tctcttctgt	gtccctctcg	12240
cgtctcttgc	ttctcactct	ctcactctca	tgcaggcgcg	tcaggactgc	ttccctccct	12300
tctgatgcca	gcatcccaga	atgccccttt	ccaaacagga	tgggtgggctc	ctggaggcag	12360
tgggcccata	acgaggtgcc	acgtcaggg	cagaggcggt	ccctcggggt	accctgcagt	12420
ccgtgtccca	ccccctccag	aaatggcccc	ccctgccttg	gggacagcac	tggagaccgc	12480
agagggtgcc	cacgagtggg	catgggaaac	aaagtcaagt	gcacgctacc	ttttttttcc	12540
gtccccccag	agggcccttc	cgtggcgccc	ggaccgtgc	tttcttctca	ggtgtgaagt	12600
cctgggggag	agaagtgagc	tgaactgggg	cccactggca	gccaccacgc	ttccctgccca	12660
tcccaggag	ccactggccc	acctggtcgc	tggctctctc	cgactcagat	gagctttccg	12720
agttctcctc	ttcggatggg	gacacgctgg	cctgatccag	gtcgtggag	gcctttcggg	12780
ctcgtttcga	gaccgacatc	tgggaaggga	acggcctgaa	tgctcagtga	tgggaaggcc	12840
gggctcctgg	cagggaagccc	ccagctgact	gcccaccacc	cacgacagct	gagctctgga	12900

acctctctgg	cgggccagga	accctctgag	aacctgatca	aaccagggat	cttgaacctt	12960
gaggacatta	tgcttggtga	aagaagccag	tcacaaaaag	acaaactctt	ataggagggtc	13020
cctagggcca	tcagactcac	agagacagaa	agtaggatga	ggggcaccag	ggctgcgccc	13080
gggggggtgg	gggggtgggg	gggtgggggg	gtgggtggtg	ggagtgagt	tttcatggga	13140
cagcatttca	gcttggaag	acgagaaaag	tctggagatg	atgggtggtga	tggttgca	13200
accacgtgaa	tgtgctta	gctgctgaac	ggggcactta	aaaatggcta	attttggcca	13260
ggcaggtgg	ctcacacctg	taatcccagc	actttgggag	gctgaggcga	gcagatcac	13320
tgaggtcggg	agtttgagac	cagcctgacc	aacatggaga	aaccccatct	ctactgaaaa	13380
acaaaattag	ctgggtgtgg	tggcgtatgc	ctgtaatccc	acctacacag	gaggccgagg	13440
caggataatc	gcttgaacct	gggaggcaga	ggttgcggtg	agccgagatt	gcgccatcac	13500
actccagcct	gggtgacaag	agtgaactc	catccccac	ccgcaaaaa	aaaaaaagag	13560
aaaaaaaaaga	aataatcctt	ccttgggtca	gaaacccctc	atatactaca	ggtatttttt	13620
ccaaattctc	tctgttcttt	gcattttcca	agttatctac	tataaatatg	gcttatcatt	13680
ttagaatcag	aaaataatac	aaagtacacg	tgactctatc	aaaagaattt	gctgctagaa	13740
tctggtcctt	tgtttctaca	cccaaatagt	gagaaatggt	caaaaggcag	gacagagaat	13800
ataccagga	gaatggaaca	cacacatctg	cacaaaactc	tgtacagaaa	cgttcacggc	13860
agcctgatct	ggaatggccc	aaaagtggaa	acaacccaaa	tggccagcga	catgtggatc	13920
aacacaccgt	gttccctcca	cacaccggaa	tctgaccggg	ccaggaaaag	gaaggagggc	13980
agccaggcgc	ggtggctcac	gcctgtcatc	ccagcactct	gggaggccga	ggcaggctga	14040
tcaggagggtc	aggagtctga	gaccagcctg	gccaacatgg	agaaaccccg	tctctaccaa	14100
aaacacaaaa	ttagccggac	gtggtagcgg	gcccctgtaa	tcccagttac	tcaggaggct	14160
gaggcaaaag	aattgcttga	accgggagg	tggaggatgc	agtgagcaga	gatcatgccca	14220
ttgcaactcca	gcctgggcca	cagaactaga	gtccgtctca	aaataaataa	ataaatgaaa	14280
cgaatggagc	tgacccgggc	tgcaagtgcg	atgcaccctg	aggacgtcac	gcttggtgaa	14340
ggaaggcga	cacaaaggct	atgcagtgtg	tgacccatt	tctatgaaat	gcccaggaca	14400
ggccctcca	cagaggcagg	aaggggatgt	gtgggtgcca	ggggccagag	gaggggatgc	14460
ggaggatcag	ctgatgggga	ccagggtttct	ttttggggtg	acggaaatct	cctggaataa	14520
tggtaatggt	tgacaaattc	cgtgaacaca	ctaaaaacca	ctgagggtgta	tattcaggaa	14580
ggatgaatct	catggtgtat	ggactataac	tcaatttttt	ttaaattgcat	actgaaaaac	14640
aattatatta	aagaaaggga	ccaggccagg	caccatggct	aacgcctgta	atcccagcac	14700
tttgggaggc	cgaagcgggc	ggatcatgag	gtcaggagat	caagaccagc	ctggccaaca	14760
tggtgaaacc	ctgtctctac	taaaatacga	aaaattagcc	gggcgtgggtg	gtggatgcct	14820
gtaatctcag	ctacttcgga	ggctgaagca	ggggaatcac	ttgaaccag	gaggtggaga	14880
ttgcagtga	ctgagatcgt	gccaccgcac	tccagcttgg	caacagaatg	agactccgtc	14940
tcaaaaaaaa	aaaaatatgg	tggtggtgcc	cataatccca	gctactgggg	aggctcaggc	15000
aggataattg	ctggaaccca	gtggcagagg	gtgcagtga	ccaagatcgt	gccactgcac	15060
tcccgcctgg	gtgacagagg	gaactccatc	tcaaaaaaaa	aaaaagaaag	gtggccaggc	15120
gcagtggctc	aagactgtaa	tcccagcact	ttgagagacc	gaggcaggca	gatcacctga	15180
ggtcaggagt	tcaagaccaa	cttggggacc	tggtgaatcc	ccgtctctaa	caaaaataca	15240
aaaattagcc	aagtgcggtg	gcagggtgcct	gtaatcccag	ctactagggga	ggctgaggca	15300
gaagaattgc	ttgaacctgg	gaggcggagg	ttgcagcgag	tcgagatcac	gccactgcac	15360
tccagcctgg	gcgacagagt	aagaccttgt	ctcaaaaaaa	aaaaaaaaaa	aagggcagga	15420
gagcaagctg	ccaggcgaga	catcagggca	aggggatgaa	gggccagccc	accttgggtcc	15480
tcccctacct	ttagcgcagg	cgtcttcttc	ttcaggccac	tggtgtcgct	actcttgtct	15540
gagtctgagt	cgctctccat	cctgtcgctg	gcagctgtgg	cggttaccgc	tgtgacggcc	15600
atgaccccc	ggctctcatc	gtcctcgta	gcgtcactgc	cgtcggcggg	gttggcctcg	15660
ggggcctcgc	tgctcgaggga	gtcactggc	tgtggg			15696

<210> 5236

<211> 4408

<212> DNA

<213> Homo sapiens

<400> 5236

gggccaagg	tgctgtcggc	ggaacagggg	agctacttctg	ttcgtttagg	tgacctgggt	60
cccagcttcc	gccagcgggc	atttgaacac	gcggtgagcc	acctgcagca	cggccagttc	120
caagccaggg	acactctggc	ccagctccag	gactgcttca	ggctggtaag	agcttcccc	180
tgctgtgcc	ccgtccccag	ggcacttctt	agaacccctg	cccaggactc	accagctgc	240
agatactgac	tgagcaccta	ggagatgatg	ctgtcagcgt	caccaatggt	catggctctg	300
tactcatggg	gcttgccctc	tggcaagggg	gacggagcta	gatcagatcc	ttaaagacag	360

cggttaggct	gggtgcggtg	gctcacgcct	gtaaccccag	caatttggga	ggccgaggcg	420
ggtgggtcac	ttgaggtcag	gagttcgaga	ccagcctgac	caacacagag	aaaccccgtc	480
tctactaaaa	atacaaaaat	tggctgggag	tgggtggcag	cgcctgtaat	cccagctact	540
tgggaggctg	aggcaggaga	atctggggag	cgaggttgaa	ccggggaggc	ggaggttgca	600
gtgagccaag	atggtgccac	tgcactccag	cctgggcgac	agagcaagac	tctgtctcaa	660
aaaaataaag	acggtgggga	cacaaagaca	gcaaaacaat	ctgtgtgcag	agggggatgt	720
gggctgggca	ggaaggccgt	ccctctgggc	cctgtcctga	ccgatgggga	gacagctctg	780
caaagcccc	aaaagcaggg	acaggacagc	aagctaccgg	ggagcaagct	gggtgtgttc	840
ggggaatgga	aaggcgggg	tgtggctggg	taaagtgaag	ccaggatggg	atccaggggag	900
cccgcagggc	ctggggctgc	aacgcacgca	ggaaaggacc	caacgcaaca	tgactcggat	960
gcatccaggg	gtcatgcacc	ctggccagag	tcgtccaccc	ctcccactgg	ccccgctctc	1020
ttcctctggc	ctaggttctc	ccctttggca	atgtggacgt	tggggccgga	tcgtgctctg	1080
gggtgggata	atcctggtcc	ctgcaggggag	ctgagcagcg	tccctggcct	ccagtctccc	1140
cgtccccagt	cctgagggcc	aacatttctt	ctagaagctg	ttgtgcagcc	cgggaggcag	1200
aaatctcaca	ggactgctct	aggggtttat	gttttggaga	cagtgcagaca	gggtcttgct	1260
ctgccaccca	ggctggacta	cagtggcttg	atcatggccc	actgcagctt	caacctactg	1320
gggtcaagag	atcctccac	ctcagcctcc	caagcagctg	gacaactggc	atgcaccacc	1380
acgccagct	tagtatattgt	tgttgtattt	ttagtagaga	ttagattttg	ctatgttgcc	1440
caggctggtc	ttaaactcct	gggttcaagt	gacccctctg	cctcagcctc	tgggtgcaca	1500
ctaccaaacc	tggttaaatt	ttttgtagag	atggggcctc	cctatgtagc	ccaggctggg	1560
cttgagcttc	tgcgctcccc	cgtacctctt	gccttggcct	cccaaagtgc	tgggatgaca	1620
ggcgtgagcc	accgtgcccc	gcagtcacag	gttttacatg	ttggtggaca	gcagtcaccac	1680
cccggcgggc	cgtgagaaac	cttgagatgc	cgccctcggt	caggattcct	ggcgtgcagc	1740
ctaggccact	gtgttttcca	tcaacatccg	gggtttgtga	caagccgcag	tttgagggtc	1800
taacccagct	ttctcagtg	ggatgacctc	cctccagggg	acactagtc	atgtctgggg	1860
acatctgtgg	ttgtcacaac	tgggggaagc	ccctgggtga	gagtagggac	actgctcagc	1920
accctgcagt	gcccagggtg	gccccacccc	agagaaccat	ctagccccc	tgtccacagt	1980
gccaagggca	agtctgtcct	agggaccctc	aggacacctc	atgtcactgt	ggccaccccc	2040
agatgcacag	tcgctgccgt	gcctctggca	cgcggtacaa	tggcgagtt	ggaaggcggt	2100
cctgtaaacy	ccatggagga	atgaaggaat	gggcccaccc	tcgcagcacg	ctgcaagcgg	2160
ctgatcaca	agcattttcc	cacctttgaa	tcctcacagc	aaagtagcct	gggccagaac	2220
tcagcccagg	cactcttcag	aaggggagaa	ggaggccaca	ggaagagaag	agctttgctc	2280
agggccacac	gtgaaggatg	ctgggctggg	aaatgggatg	tgggtgtgtg	ctcatcatgt	2340
ctcacttggt	cctttaagt	ctactgaaga	ccctggatat	ccaggcctgc	ccttgggggg	2400
tggggggcgc	catggttggg	gaagacaatt	cacagatgaa	tatatagggc	gtcgcgttgg	2460
atgatgcttg	gaaaaatgaa	catgtaccag	gataaggaag	tggctgtgct	ggggctgggtc	2520
accctgaaga	ggggacactt	gaagtcaggt	ctaaatgaca	gagagggagt	gcgtcagaat	2580
gggcaggagt	gtgatctgag	cggagggcac	ggcccgtgca	aaggccctgg	ggcaggactg	2640
tcccgccatg	ttggaggaat	aggaaggagg	cctgggaggg	tggagccgag	tgaggagggg	2700
atggggcagg	ttgggcccga	cctgggcttc	gaccccaagg	gagttgggag	ccctggaggg	2760
ctctgggcag	aggagcggcc	tgatccaagg	tgggtttcat	ttaaaaggat	cactctgatg	2820
ggggagggtc	ggccaccggg	tgggggcgag	ggccagagga	gacagtggga	cgtaaaccca	2880
ggcaagtgtc	gcccggcctc	aggagtcacg	ctgtggtggt	gagaagtagc	tgggctctgg	2940
gtgtttcgaa	gtcagagctg	cccgggtccg	atgtggggag	tgagagaaga	ccccaaagaga	3000
cccctgaggc	ttgtaacctg	agcagacaag	gagagcaggg	gggctgaggg	gaggccgggg	3060
gggttgacga	gtggatatta	ggagcctggc	cttggacagg	gtgaggggag	atgcctgggtg	3120
ggcaccgagg	ggacgcgtct	gcatatgcag	ctggcttcag	gtctccagca	ctggcgcggc	3180
gagggtctgg	aggcgacag	cagtctggag	tcgatatttt	gacggcgtgc	cgcattcccta	3240
ccagccattg	agatgatgag	gaagatgggg	ccctgtggac	aggggtgggg	gtgggtgccca	3300
cgtgctgggg	acacagcaac	aacgaggaca	gagtcctgag	tgttccccctg	ccaggggagg	3360
ataaacacca	agtcaatgaa	caccaaagcc	gcacgctgtg	ctcccagaga	gaggggcaga	3420
tgtgacggga	gggactgggg	ctgccacacc	atggggcagg	aaggctctac	caagggtcac	3480
ctggagctga	ggccgaacgc	ggaccttgtg	aaggggccgg	gaagcaggct	cccggctgag	3540
tgggcagtg	gtgcaaaggc	cctggggcag	aagcctgctg	gagtgccggg	agggcagaat	3600
ggagccagtg	tggcctcagt	ggagacagca	gtgggggtgc	atgggagatg	agggcagagg	3660
tgtcccaggg	gccagcccac	caaggccatg	gtgaggagct	gggttttatc	ttaaagggtac	3720
tgggcagcca	caggttttag	ggtgaggagt	gacacgaccc	cacagacact	gtgttacgtg	3780
cactccctga	tgacctcatg	gggaagtttg	aactattgcc	tctttctgca	agacaacacg	3840
cccactgtgg	tacaactgac	ttggaactcg	tggcctttct	cccaggactg	tgaatgtgcc	3900
cagggtccctg	ggggaggggg	aggtgggggt	tgtgaaaggt	catttgccaa	gaagccatca	3960
tttccccact	gtactctctc	tccagattga	aaaggcccag	caggctccag	aagggcagcc	4020

gctgccccac	agatgatggg	ggagtaggca	ttctttctgc	ccagagcact	tgttctcttc	600
ctccaccctt	ttgggttgta	ttgtagcatc	ttgactttca	gcttaacaca	tcccaactta	660
agcagaagcc	cttttgcctt	ctctctcttt	aaaactagat	ccatagaaat	tatttttatt	720
acagtaatag	ggcaagatag	ttttatgtca	tatataaact	ggaattatgt	agtgttagta	780
gtagttatgt	ctcctgaaag	gaaccagttg	attataaaga	agaaaagtta	ggg	833

<210> 5240
 <211> 358
 <212> DNA
 <213> Homo sapiens

<400> 5240						
tgattgaaac	tttaaaccct	tcccttaagt	tcccctaaaa	acctccctgt	gcctagtaag	60
gttttgcatt	tgtgaggagg	gtgaagggtat	ttggaccttg	gagaaacttt	gcaatttgaa	120
atctgcctat	gcagttgtac	accagaaatg	aacatgggtca	atgccatatt	gtgctctttg	180
tctttttctt	ctaccaagat	tcctcaccct	taggagacgt	tgggttaatat	aggcatttcg	240
gttttggttaa	tctgatcatg	agtgccctgt	agcatggcat	gaggcatgat	tgaagcagtt	300
ataaaaaattt	ggctcagagt	taagccctat	aatttgtttt	aaagaattac	ctcttcag	358

<210> 5241
 <211> 147
 <212> DNA
 <213> Homo sapiens

<400> 5241						
ggtcccagct	actcgggagg	cttaggcagg	agaatggcgt	gaaccagga	ggtggagctt	60
gcagtgcagc	gagatcgccg	cactgcactc	cagcctgggc	gacagagcga	gactccatct	120
caaaaaaaaaa	aaaaaaaaaa	aattgtg				147

<210> 5242
 <211> 141
 <212> DNA
 <213> Homo sapiens

<400> 5242						
cagctactcg	ggaggctgag	gcaggagaat	ggcgtgaacc	tgggaggcag	agcttgcagt	60
gagccgagac	agcgccactg	cactccagcc	tgggtgaaag	agcgagactc	cgtctcaaaa	120
aaaaaaaaaa	aaaaaaaatt	t				141

<210> 5243
 <211> 183
 <212> DNA
 <213> Homo sapiens

<400> 5243						
aatacaaaaa	attagccggg	tgtggtggcg	ggcgcttgta	gtcccagcta	ctcgggaggc	60
tgaggcagga	gaatggcgtg	aaccggggag	gtggagcttg	cagtgcagctg	agatcggtcc	120
actgcactcc	agcctgggag	acagagcgag	actccgtctc	aaaaaaaaacc	cacaaacaac	180
aaa						183

<210> 5244
 <211> 162
 <212> DNA
 <213> Homo sapiens

<400> 5244

[illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible]

taaatgtctt	cttctgagaa	gtatctgttc	atatcctttg	cccacttttt	gatggggttg	840
ttgtttttt	tcttgtaaa	ttgtttgagt	tcattgtaga	ttctggatat	tagccctttg	900
tcagatgagt	agggtgcaa	aactttctcc	cattctgtag	gttgccgtgt	cactctgatg	960
gtggtttctt	ttgctgtgca	gaagctcttc	agtttaatta	gatcccattt	gtcaattttg	1020
gcttttgttg	ccattgcttt	tgggtgttta	gacatgaagt	tcttaccat	gcctatgtcc	1080
tgaatgggat	tgcctaggtt	ttcttctagg	gtttttatgg	ttttagggtc	aacatgtaag	1140
tctttaatcc	atcttgaatt	aattttttgt	taaggtgtaa	ggaagggatc	cagtttcagc	1200
tttctacata	tggctagcag	gttttccca	caccatttat	taaataggga	atcctttccc	1260
cattgcttgt	ttttgtcagg	ttttgtcaag	accagatagt	tgtagatatg	tgacattatt	1320
tctgagggct	ctgttctgtt	ccattgggtc	atatctctgt	tttggtagca	gtaccatgct	1380
gttttgggta	ccatagcctt	gtagtatagt	ttgaagtcag	gtagtgtgat	gcctccagct	1440
ttgttctttt	ggcttaggat	tgacttggca	atgtgggctc	ttttttgggt	ccatatgaac	1500
tttaaagtag	ttttttccaa	ttctgtgaag	aaagtcattg	gtagcttgat	gggaatggca	1560
ctgaatcttt	aaatgacctt	gggcagtatg	gccattttca	cgatattgat	tcttcctacc	1620
catgagcatg	gaatgttctt	ccatttggtt	gtatccccct	ttatttcatt	gagcagtggt	1680
ttgtagtctt	ccttgaagag	gtccttcaca	tcccttgtaa	gttggattcc	taggtatttt	1740
attctctttg	aagcaattgt	gaatgggagt	tcactcatga	tttggctctc	tgttgtctcg	1800
ttattgggtg	ataagaatgc	tttgtatttt	tgacacattg	ttttgtatcc	tgagactttg	1860
ctgaagttgc	ttatcagctt	aaggagattt	tgggctgaga	tgatggggtt	ttctagatat	1920
acaatcatgt	catctgcaaa	cagggacaat	ttgacttctt	cttttctgaa	ttgaatgcc	1980
tttatttctt	tctctgtctt	gattgccctg	gccagaactt	ccacactatg	ttgaatagga	2040
gtgggtgagag	agggcatccc	tgtcttgtgc	cagttttcaa	agggaatgct	tccagttttt	2100
gccatttcag	tatgatattg	gctgtgggtt	tgtcatagct	agctcttatt	attttgagat	2160
acatcacatc	aataccta	ttattgagag	tttttagcat	gaagcattgt	tgaattttgt	2220
caaaggcttt	ttctgcattc	attgagataa	tcattgtggt	tttgtctttg	gttctgttta	2280
tatgtgggat	tacgtttatt	gattttctga	tgttgaacca	gccttgcatt	ccaggaggga	2340
agcccactag	atcatgggtg	ataaactttt	tgatgtgtcg	ctgtattttg	tttgccagta	2400
ttttattgag	gattttttgca	tcaatgttca	tcaaggatat	tgggtctaaaa	ttctcttttt	2460
tggtttgtgc	tctgccaggc	tttggtatca	ggatgattct	ggccacataa	aatgagttag	2520
ggaggattcc	ctctttttct	attgattgga	atagtttcag	aaggaaatgg	accagctcct	2580
ccttgtacct	ctggtagaat	tgggtgtgga	atccatctgt	tccctggact	tttttgggtg	2640
gtaagctatt	gattattttcc	tcaatttcag	tgcctgttat	tgggtatatt	agagattcaa	2700
cttcttctct	gttttagtct	gggaggatgt	atgtgtcaag	gaatttatcc	atttcttcta	2760
gatttttgtag	tttattttgca	tagaggtggt	tatagtattc	tctgatggtg	gtttgtattt	2820
ctgtgggatc	gggtggtgata	tcccctttat	cattttttat	tgcgtctatt	tgattcttct	2880
ctcttttctt	ctttattagt	cttgctgtct	atcaattttg	ttgatctttt	caaaaaacca	2940
gctcctgaat	tcattaattt	tttgaagggt	tttttgtgtc	tctatttctt	tcagttcttc	3000
tctgatctta	gttatttctt	gccttctgct	agcttttgaa	tgtgtttgct	cttgcttctc	3060
tagttctttt	aatttgtgat	ttagggtgtc	aatttttagat	ctttcctgct	ttctcttttg	3120
ggcatttagt	gctataaatt	tccctctaca	cactgctttg	aatgtgtccc	agagattctg	3180
gtatgttgtc	tttgtttctc	ttggtttcaa	agaacacctt	tatttctgcc	ttcatttctg	3240
tatgtaccca	gcagtcattc	aggagcaggt	tgttcagttt	ccatgtagtt	gagtggtttt	3300
gagtgaagtt	cttaatcctg	agttctagtt	tgattgcact	gtggtctgag	agacagtttg	3360
ttataaattc	tgttctttga	catttgctga	ggagtgcctt	acttccaact	atgtcaattt	3420
tggaaatagg	gtgggtgtgg	gctgaaaaga	atgtatattc	tgttgatttt	gggtggagag	3480
ttctgtagat	gtctattagt	tccgcttggt	ttagagctga	gttcaattcc	tgggtatcct	3540
tgttaacttt	ctgtcttggt	gatctgtcta	atgttgacag	tggggtgtta	aagtctctga	3600
ttattattgt	gtaggagtct	aagtctcttt	gtagttcact	aaggacttgc	tttatgaatc	3660
tgggtgtctc	tgtattgggt	gcataatat	ttaggacagt	ttgcttttct	tgttgaattg	3720
atccctttac	cattatgtaa	tggccttctt	tgtctctttt	gatcttttgt	ggtttaaagt	3780
ctgtttttat	agagactagg	attgcaatcc	ctgccttttt	ctgttttcca	tttgtctggg	3840
agatcttctc	ccatcccttt	attttgagcc	tatgtgtgtg	tctgcacgtg	agatgggttt	3900
cctgaataca	gcacactgat	gggtctttgac	tctttatcca	atttgccagt	ctgtgtcttt	3960
taattggagc	atttagccta	tttacattca	aagttagtat	tgttatatgt	gaatttgatc	4020
ctgtcattat	tatgtcagtt	ggttattttg	ctcattagtt	gatgcagttt	cttcttagcc	4080
tcgatgggtc	ttacaatttg	gcattgtttt	gcagtggctg	gtactgggtg	ttcctttcca	4140
tgttttagtgc	ttcttccttc	aggagctctt	ttaggacagg	cctgggtggg	acaaaatctc	4200
tcagcatttg	cttgtctgta	aagt				

ctttggtgaa	tctggcaatt	atgtgtcttg	gagttgctct	tctcgaggat	tatctctgtg	4500
gtgttctctg	tatttctctga	atgtgaatgt	tggcctgcct	tgctagattg	gggaagttct	4560
cctggataat	atcctgcaga	gtgttttcca	acttggttcc	attctccccg	tcactttcag	4620
gtacacaaaa	cagacgtagg	tttgggtcttt	tcacatagtc	ccatattttct	tggagggtctt	4680
gtttcttttt	attctttttt	ctct				4704

<210> 5254
 <211> 2523
 <212> DNA
 <213> Homo sapiens

<400> 5254						
atttttatac	catttttacag	gtgaggaaat	ttaccaagtt	taaataattt	acccacagtc	60
acagtaaagt	ccccaacctc	aggtagttaa	taatgaagtg	gaggagacaa	gatgcataaa	120
gaagtgacta	ttaatagtaa	ttttaaaaca	gctattacaa	atcagcataa	aattatatgc	180
catgcagtta	acgaatgtcc	tgaattaaaa	agagtgtctc	tactgctgga	ggcttcaata	240
attaacaaaa	ataatgtatg	ttaatttgaa	cacagtgcac	gatgcgttat	tatatttact	300
tctattatta	ttaattatgg	ataagatgtg	gatgggtgca	gagagagagt	aggaagaggt	360
acctcgata	tagaatctgg	aaaaaaaaagg	tagaattgtg	gacgacagta	ggggtggcca	420
gaatatagtt	tgtatagcat	agtgatagga	gataagatta	gactggtaga	ttgtagcttt	480
atcttagaag	gctttgtatg	tcagtctgaa	atataactga	gccttccaca	ggctaaatgg	540
ctaaattcgt	tgtgcggcat	tccatcctct	gcttaagtgg	cttctgggtga	cagggtctct	600
acagaaaagg	tcattaggaa	cagatttttt	tcctttggag	gattttttta	tattaggaat	660
caccttttat	tgaagcaaat	ccatctcact	gtagatttca	ctccttgaaa	ttaggcaaac	720
aatgtagtta	catagagtga	atctgcaggt	cagacatttg	aggatggctg	tcagtcttct	780
ctaggttttt	tcataacctg	ggctactatt	accagttcct	tcacccaaac	tatattaagc	840
ttgacactga	attcctctct	tttaagtcag	tttgtctggc	agctctcctg	gaattaaatt	900
ttgattcttt	cagatgacta	cacattaaat	ggtgatggat	tgggttttgt	tatttccaga	960
ctatatattt	ttgtttcatc	tataattcct	agcattgctt	ggtcataatt	ttttttctta	1020
gaaccgtgat	tatatacat	attaattagt	tttaaaaatc	aaatccgcaa	gggtaattta	1080
atcccagaat	gaaaatgacc	tctatataag	tatttcaaaa	atcatttatt	tgtaatgagt	1140
aaaaatgttg	aaaataaggc	ttacttttat	tatttgaata	tggtaattat	gtaattatcc	1200
ttttaatatg	ttaaggttat	attctgtgcc	ttagagtatg	ctaagcactt	tatacataat	1260
tatcttattt	aagcctcgtg	gaaatcttat	gagcaaaatg	ttactcggta	cacttaaagt	1320
acaggtaact	gaggcttaga	gatgtaaaat	aatttgtcca	ccacagtgtc	tttaaaagat	1380
gctcgttaac	actatattgt	aatttcaaac	cctgattcca	ttaatgcttt	ttgttgtgtt	1440
gcctttactg	ataattgtgt	tcaatattcc	catgaggagg	gcagtctttg	actttttatt	1500
tatgataaag	attatttaaag	tgcttaaagt	tttttattgt	atagcgtgtt	ttatcatcaa	1560
acagggttta	gtttttttaag	ttaaactgat	caaaaataat	aaaagctgat	ggctctatga	1620
cacttgcat	tgagagaaca	agaataggga	gcaatatttc	aagaaaatca	ttcttactgt	1680
ttttcaaaaac	tgtttagtgt	cagagatgcc	ccaagaccac	tcctagggtt	attgtttcga	1740
tagaaggact	tacaggatta	gtatatagtt	gcactcctga	ctaagattta	ttatagcaaa	1800
agaatacaca	gcaagattag	caaaggaaaa	aggtgcatgg	gaccaagtct	ggaggaaatg	1860
agtctcgaac	tcctgacctc	aggtgatctg	ccagccttgg	cctcccaaag	tgctgggatt	1920
acaggcatgt	gccactgcac	ccagcctgaa	agtattactt	ttaagaattg	ttattatact	1980
ttacttgaaa	gaaataacca	ctgctatagt	attatatcat	accaaagcat	atattttata	2040
atttgggcta	cctagaatta	ttattttttt	tttggaaatg	atgttatatg	tagttataaa	2100
tcacaaatga	cttggttaata	aaggccatat	gatcttcaaa	accaaactgg	aactagcata	2160
gataagacct	gctgttttaa	caggtaactc	ttggttgaga	gaagataatg	gcagtcttgt	2220
ctcttttttc	cctttattat	gaatgcataa	cactgggtgt	tctgttaggc	aagggttgtt	2280
tcttggttat	tgttttggg	ccagtgcata	gcacaacca	cgtttggcat	atagtagggt	2340
cttaaatatt	tatgaatgag	tgagtatgtg	agtagaagga	gtaactgggc	tgggaatgat	2400
ggctcacacc	tgtaatccca	gtgctttcgg	aaactgaagt	gggatgattg	cttgaggcca	2460
ggagttcaag	accagcctga	ggagcatagt	gagaccctct	tgtctacaaa	aaaaaaaaaa	2520
aaa						2523

<210> 5255
 <211> 2523
 <212> DNA

<213> Homo sapiens

<400> 5255

attttttatac	catttttacag	gtgaggaaat	ttaccaagtt	taaataattt	acccacagtc	60
acagtaaagt	ccccaacctc	aggtagttta	taatgaagt	gaggagacaa	gatgcataaa	120
gaagtgacta	ttaatagtaa	ttttaaaaca	gctattacaa	atcagcataa	aattatatgc	180
catgcagtta	acgaatgtcc	tgaattaaaa	agagtgtctc	tactgctgga	ggcttcaata	240
attaaacaaa	ataatgtatg	ttaatttgaa	cacagtgcac	gatgcgttat	tatatattact	300
tctattatta	ttaattatgg	ataagatgtg	gatgggtgca	gagagagagt	aggaagaggt	360
acctcgtata	tagaatctgg	aaaaaaaaagg	tagaattgtg	gacgacagta	gggggtggcca	420
gaatatagtt	tgtatagcat	agtgatagga	gataagatta	gactggtaga	ttgtagcttt	480
atcttagaag	gctttgtatg	tcatgctgaa	atataactga	gccttccaca	ggctaaatgg	540
ctaaattcgt	tgtgcggcat	tccatcctct	gcttaagtgg	cttctgggtga	cagggctctc	600
acagaaagcc	tcattaggaa	cagatttttt	tcctttggag	gattttttta	tattaggaat	660
caccttttat	tgaagcaaat	ccatctcact	gtagatttca	ctccttgaaa	ttaggcaaac	720
aatgtagtta	catagagtga	atctgcaggt	cagacatttg	aggatggctg	tcatgcttct	780
ctaggttttt	tcataacctg	ggctactatt	accagttcct	tcacccaaac	tatataaagc	840
ttgacactga	attcctctct	tttaagtcag	tttgtctggc	agctctcctg	gaattaaatt	900
ttgattcttt	cagatgacta	cacattaaat	ggtgatggat	tgggttttgt	tatttccaga	960
ctatatattt	ttgtttcatc	tataattcct	agcattgctt	ggtcataatt	ttttttctta	1020
gaaccgtgat	tatatacatt	attaattagt	tttaaaaatc	aaatccgcaa	gggtaattta	1080
atcccagaat	gaaaatgacc	tctatataag	tattttcaaaa	atcattttatt	tgtaatgagt	1140
aaaaatggtg	aaaataaggc	ttactttttat	tattttgaata	tggttaattat	gtaattatcc	1200
ttttaatatg	ttaaggttat	attctgtgcc	ttagagtatg	ctaagcactt	tatacataat	1260
tatcttattt	aagcctcgta	gaaactttat	gagcaaaatg	ttactcggta	cacttaaagt	1320
acaggtaact	gaggcttaga	gagttaaaat	aattttgtcca	ccacagtgtc	tttaaaagat	1380
gctcgttaacc	actatattgt	aattttcaaac	cctgattcca	ttaatgtctt	ttgtttgtgt	1440
gcctttactg	ataatttgtg	tcaatatctc	catgaggggag	gcagtctttg	actttttatt	1500
tatgataaag	attatttaaag	tgtctaaagt	ttttttattgt	atagcgtgtt	ttatcatcaa	1560
acagggtttta	gtttttttaag	ttaaactgat	caaaaataat	aaaagctgat	ggctctatga	1620
cacttgcat	tgagagaaca	agaataggga	gcaatatttc	aagaaaatca	ttcttactgt	1680
ttttcaaaaac	tgtttagtgt	cagagatgcc	ccaagaccac	tcctagggtt	attgttttga	1740
tagaaggact	tacaggatta	gtatatagtt	gcactcctga	ctaagattta	ttatagcaaa	1800
agaatacaca	gcaagattag	caaaggaaaa	aggtgcatgg	gaccaagtct	ggaggaaatg	1860
agtctcgaac	tcctgacctc	aggtgatctg	ccagccttgg	cctcccaaag	tgctgggatt	1920
acaggcatgt	gccactgcac	ccagcctgaa	agtattactt	ttaagaattg	ttattatact	1980
ttacttgaaa	gaaataacca	ctgctatagt	attatatcat	accaaagcat	atattttata	2040
atttgggcta	cctagaatta	ttattttttt	tttggaaatg	atgttatatg	tagttataaa	2100
tcacaaatga	cttggttaata	aaggccatat	gatcttcaaa	accaaactgg	aactagcata	2160
gataagacct	gctgttttaa	caggtaactc	ttgggttgaga	gaagataatg	gcagtcttgt	2220
ctcttttttc	cctttattat	gaatgcataa	cactgggtgt	tctgttaggc	aaggggttgt	2280
tcttgtttat	tgttttgtgg	ccagtgcata	gcacaaccaa	cgtttggcat	atagtaggtg	2340
cttaaatatt	tatgaatgag	tgagtatgtg	agtagaagga	gtaactgggc	tgggaatgat	2400
ggctcacacc	tgtaatccca	gtgctttcgg	aaactgaagt	gggatgattg	cttgaggcca	2460
ggagttcaag	accagcctga	ggagcatagt	gagaccctg	tgtctacaaa	aaaaaaaaaa	2520
aaa						2523

<210> 5256

<211> 186

<212> DNA

<213> Homo sapiens

<400> 5256

actctcagga	gccttctccg	cagttggctt	cctcggtagc	ttccacacgg	agcatgcccg	60
agagcctgga	cagcccaacc	tctggcagac	caggggttac	cagcctcaca	gctgcagctg	120
ccttcaagcc	tgtaggatcc	actggcgtca	tcaagtcacc	aagctggcaa	cggccaaacc	180
aaggag						186

<210> 5257

```
<211> 931
<212> DNA
<213> Homo sapiens
```


<210> 5262
<211> 124
<212> DNA
<213> Homo sapiens

<400> 5262							
atggagtcctc	actctgtcac	ccaggctgga	gtgcagtggc	gtgatctcgg	ctcactgcaa		60
cctccgcctc	ccagggttcac	gcaattctcc	tgccctcagcc	tccaagtag	cttggactac		120
aggc							124

<210> 5263
<211> 512
<212> DNA
<213> Homo sapiens

<400> 5263							
gtcttttgac	atgctgtctt	gtgtggctga	gacgtagatc	aagagaaatt	tgtaagaaag		60
acaataaggt	acaaaaatcg	ccgaagctaa	tgtcaagatg	gagataaata	gatctatatt		120
tgccatatat	ggtagtataa	gaaaagtctg	tgcaaatttg	ctcgacattt	atggacttct		180
atgattcatc	taccagggcc	agcagctcca	gccaagagat	atagaatgtc	ttcaactgta		240
tttctttcct	aaattgtttc	attacaaaaga	agccatgttg	tgtattcaga	agaaaattcc		300
aggaccgcat	gaaagtcact	atttggggaac	aggcctgaga	aagcttgctt	agaggaattc		360
caaaagtatt	caaaaggcag	ttattgacca	aacacataat	aattctctaa	gcatcaacaa		420
ttttccatag	atccaagctc	acatatacag	cgtattttct	gtggctagtc	actccagaaa		480
tagagggttc	tctgctttct	tgactgattg	ac				512

<210> 5264
<211> 512
<212> DNA
<213> Homo sapiens

<400> 5264							
gtcttttgac	atgctgtctt	gtgtggctga	gacgtagatc	aagagaaatt	tgtaagaaag		60
acaataaggt	acaaaaatcg	ccgaagctaa	tgtcaagatg	gagataaata	gatctatatt		120
tgccatatat	ggtagtataa	gaaaagtctg	tgcaaatttg	ctcgacattt	atggacttct		180
atgattcatc	taccagggcc	agcagctcca	gccaagagat	atagaatgtc	ttcaactgta		240
tttctttcct	aaattgtttc	attacaaaaga	agccatgttg	tgtattcaga	agaaaattcc		300
aggaccgcat	gaaagtcact	atttggggaac	aggcctgaga	aagcttgctt	agaggaattc		360
caaaagtatt	caaaaggcag	ttattgacca	aacacataat	aattctctaa	gcatcaacaa		420
ttttccatag	atccaagctc	acatatacag	cgtattttct	gtggctagtc	actccagaaa		480
tagagggttc	tctgctttct	tgactgattg	ac				512

<210> 5265
<211> 128
<212> DNA
<213> Homo sapiens

<400> 5265							
tgggatggag	tctcactctg	tcacccaggc	tggagtgcag	tggcgtgac	tcggctcact		60
gcaacctccg	cctcccagggt	tcacgcaatt	ctcctgcctc	agcctcccaa	gtagcttgga		120
ctacaggc							128

<210> 5266
<211> 5823
<212> DNA
<213> Homo sapiens

<400> 5266

ttgacataaaa	taaggtagta	gttttaaaggg	aaagtaatga	ttagcaaaac	ttatgaagac	60
aggagcgcac	aacgcacatt	aaatagtggt	taaattacct	aatcctagge	ttgctgaatc	120
ttcagacacg	tatatacata	atataatttt	gtgtcacaaa	ccagtcactc	tgtgttttct	180
atatgaagag	aaaataggtt	tgtgttaaga	aatgatctct	gaatgttcaa	gaaaataata	240
ctatgggctt	gcttacatgg	gtggaagagc	aaagaactcc	tcaaatcata	aatgacagga	300
ctaagttatt	tggacgagaa	aacaaacaaa	ctcaaatga	catttatgag	agcttatgaa	360
gtgaatggat	gatttggttg	tgattctgta	aaggtaatga	attggaaaga	cagtgtttcc	420
tcttctgcat	gtctaaggta	cacagcaagc	aggagcagat	tcctcctcat	aagcattcac	480
tccactcaga	gccatgtagc	cagcacttcg	tcctgagttt	tatctctcag	ttttaaccac	540
atattttttt	gctagttggc	tttttttaat	atttgaaaaa	ttatatatta	ttttttccca	600
ttgaattttt	gaaatgtttt	cattaagttg	aggtataaca	tatatatatg	ttatatatat	660
atgttatata	tatatgtttt	atatatgtta	tatatatggt	ttatatatat	gttatatata	720
tatatgtttt	atatatatgt	tatatatata	tgttttatat	atatatatgt	tatatatata	780
tgttttatat	atatatatat	atattttttt	tttttttttt	gagacagagt	cttgctctgt	840
cgcccaggct	ggagcacagt	ggtgcaatct	cagttcactg	caagctttac	ctcctggggt	900
caaatgattc	tcttgccaca	gcctctagag	tagctgggac	tacaggcata	tgccaccaca	960
cctggctaata	tttggatatt	ttagcagaga	tggggtttca	ccatgttggc	caggctgggc	1020
tgaaactcct	cctggcctca	agtgatctgc	tcacctcagc	ctcccaaagt	gctgggatta	1080
caggtgtgag	ccaccgagcc	cagctgaggt	ataacattat	tgatatgggt	tggtctctgt	1140
tccccaccca	aatcttatct	tgaattgtat	tcccataatt	cccacatggt	atggggaggga	1200
cccagtgaga	gataatttga	atcatgaggg	cggtttctct	catactgttc	tcatggtagt	1260
gaatatgtct	catgagatct	gatggtttta	tcagatcttt	ctgcttttgc	atcttctcca	1320
ttttctcttg	ccaccacat	gtaagaaggt	ccttttgcct	cccgccatga	ttctgagcc	1380
tccccagcca	tgtggaactg	taagtccaat	ttaacctctt	tttcttccca	gtcttgggta	1440
tgtctttatc	agcagtgtga	aaatggacta	atacaataaa	ttggtaccga	gagtggggtg	1500
tttctgaaaa	gatacctgaa	aatgtggaaa	caactttgga	actgggtatc	aggcagaagt	1560
tgaaagagtg	tggaaggctc	agaagaagac	aggaaaatgt	gggaaagtgt	ggaacctcct	1620
agaaacttgt	tgattggctt	tgaaaaaaaa	aaatgctgat	agtgatatga	ataataaagt	1680
ccaggttgag	gttgtctcag	atggacatga	ggaacttctt	gggaacagga	gcaaagggtga	1740
ctcttggtat	gttttagcaa	agagactggt	ggcattttgc	ccctgccctt	gaaaggatga	1800
tttaggggat	ctggcagaag	aaattttctaa	gcagcaaaac	gagcattcaa	gaggtgactt	1860
gggtgctggt	aaaggcattc	cattttaaaa	aggaacacaga	gcataaaaagt	tcagaaaatt	1920
tgacgcctga	cgatgcagta	gaaaagaaaa	acacattttc	tgaggagaaa	ttcaagctgg	1980
ctgaagaaat	ttgcataagt	gtcaaggagc	caaattgtaa	tccccaaagc	aatggggaaa	2040
atgtctccag	gacatgtcat	aggtcttcac	agcagtcctt	cctatcatag	acctggaagt	2100
ctaggaggaa	aaactgggtt	catggggccag	gccagggttc	cttatctggt	tgacgcctag	2160
gcacttggtg	ccctgtgtcg	taggcagaag	gggcttgcc	tgtctcatat	gagactttgg	2220
actatggact	tttgggttaa	tgctgaaatg	agttaagact	ttgggggact	gttgggaagg	2280
catgactggt	tttgaaatgt	gaggacatga	gatttgaggg	agcaagaggt	ggaatgatat	2340
ggttttggctg	tgccccccac	caaattctcat	cttgaattgt	attcccataa	ttgccacatg	2400
ttataggagg	gacccgttgg	gagcataatt	gaatcatggg	gggcagtttc	ccccactctg	2460
ttcttgtggt	agtgataaag	tctcacaaga	tctgaagggt	ttatcagggg	tttccgcttt	2520
tgcatcttcc	tcatttttct	ttgtcaccac	catgtaagaa	gggcctttat	cctcccacca	2580
tgatcctgag	gccttcccac	acatgtggaa	ctggactacg	tccaattaaa	cctctttttc	2640
ttcccagctc	cgggtatgtc	tttatcagca	gtgtgaaaat	ggactaatac	atatatatat	2700
aaagtaaaat	tgactatttt	cagtgaatag	gtctttgagc	tttgacaaat	gcctccaagt	2760
tgttataacc	accaccacac	tcaacatata	gagcagacca	ggtgttgtgg	ctcatgcctg	2820
taatcccagc	actttgggag	gctgaggtgg	gtggatgtct	tgggcccagg	agtttgagac	2880
cagcctgggc	aacacagtga	gacaccattc	ctacaaaaaa	tacaaaaatt	agctgggcac	2940
gggtggcacac	atctgtagtt	ccagctactt	gggaagctga	gatggggagg	tcacttgagc	3000
ccaagaggca	gaggttgtag	tgagccaagg	ttgtgccact	gcactccagc	ctaggtaata	3060
gagcaggact	ctgtctcaaa	aaaaaaaaaa	gatataaaac	agtttctctc	ctcccaaaat	3120
ttccctattc	ctcttggttag	cagcttctac	tcctactccc	aaactctagc	aaaccactga	3180
tttggttttt	gtacctatag	ttttgctaaa	atatcataca	aatgaaatca	aacagcatgt	3240
agccttttta	gtatggcttc	tttcaactgt	tataaaaata	taaaaattca	tttatgttgc	3300
tatgtgtttt	aatagttcat	tgctttctat	ttctgaatag	tcttgcatgt	tatggatgtc	3360
ctacggttgt	ttatccatta	gccagttgaa	gaacatttgg	ttgttgccag	tttgggtgat	3420
tataaaccca	ctctaaacat	tcataattcaa	gtttttgtat	gagcatttaa	gttttcattt	3480
ctttgatgta	aaatcctagg	aatgggatcg	tgggctctat	atgataagtt	tattttaact	3540

ttataatttaa	ccaccaaaatt	tttccaaagt	gaaatattat	cttgactgc	cattgacaat	3600
gtatgagagt	ccttactgct	ccacatcttt	gttagtactt	agtattgtca	gtttttgttt	3660
tgcttttaga	cattttaata	gatgtctggt	attaactcat	ttgcactttc	ttaatgacta	3720
ataatgttga	atatgtgcct	atttaccatc	catacgtctt	cttttataaa	atatctattc	3780
aactcttttg	accattttta	actgtattgt	ttttcttatt	gttgagtttt	gagagtttgg	3840
atatgtccta	gatatgagtc	ctttgtcaga	aatgtgtttt	gtaaataatt	tctgccaggc	3900
tgtagcttgc	attttcagtc	tcttaacagt	gtctttcaca	gaacaaaagt	ttttaatttt	3960
tctgaagtcc	agttttacct	atttttattt	atgcttttaa	tgctatatct	aagaaatatt	4020
tgccaaacat	agggtcacaa	ctattttacc	tatgttttct	tctggaagtt	tcatagggtt	4080
gtgttttata	tttagaccta	tgatccattt	ttagttcatt	tttatagaaa	gaacaagggtg	4140
tgagtcaaga	tttacttttt	gtatatcaat	gtccaatcat	ttcagatcaa	tattgaaaag	4200
actatactgt	ctttactgaa	ttacctttga	ccatgtatgt	ataagtctat	ttctagactc	4260
tctattctgc	ccccatttat	ctatgtgtct	gttctttcat	caatgtgaca	ctgtcttgat	4320
tacttaggta	agtcttggaa	tgcaatatct	tgagttcttt	aactttgttc	ttctttgtct	4380
gctttggcta	tcttagtgcc	tctgactttc	catatacatt	ttacaaaacag	tttattgata	4440
ttatttttaa	aaatcctaaa	ggagttttga	tttggaattg	tggaatctct	gtatcagttt	4500
gttcagaatt	gatatctcaa	caatatattag	tcttttgtgt	aataaaacaca	gtatatgtct	4560
ctatttaggt	ctcctttgat	tttttcaaga	gtgcttgtag	ttttaagcat	atgagtgggt	4620
cacattgata	gtatctaaga	atttcatggt	tgtggtgtta	ctgtaaaatga	cacagtgttt	4680
taatgtttgt	cttcagttgc	ccattgctag	tatacaaaat	tgtatatgtt	ctttgtatcc	4740
tgcaatcttt	ctaaaactca	ctcatgagtt	ctagtagctt	tgtagtagtt	tcctgaagat	4800
tttaagtcta	aaatggttaag	gaaaaaatat	attttaaacc	aagaataaaa	attctattgc	4860
atgattttaa	atcaggattg	caaggacaaa	gattgtctct	gattatgcag	ttctattttac	4920
aggatgatat	agggtggcta	gcggggccaa	ctttgactct	caaacatgtg	ggtgttgaat	4980
ccttatccac	ttgctgctgc	atgtgatctg	agatgccttg	actacgttat	gggcttttcc	5040
atcaaagtct	atgctttaac	aacagaaagc	atcttccaga	catatcatag	ggatgagcaa	5100
gtacaattca	tgtgaaatca	ttcagagata	taaagttcag	gataataata	ctagtgtcgt	5160
ccagaaaaat	caggaagtct	tctctttag	agcacatgac	ctgtcatgat	atagcccgta	5220
gcaggattcg	tccatacata	cccccaagg	cattaccaca	tcaccgtgga	ataaggctgc	5280
aatacatagc	accacagtgc	tctgataag	ggcccggctt	gtataaaaat	ggttagagtg	5340
cgaggaagtt	gttataactg	gaataattct	tatggcagct	atgtctccaa	aaatattacg	5400
aagcaagaaa	aacatttggc	tggaggtgtg	cgaactgaga	ttctcagggc	gtaggagctg	5460
tgtgtagaac	agaggccaaa	ggagtagtca	tacccggggt	ggatcaaagg	aagaagcaga	5520
ggaggtagac	agatggaggt	ggcttggcta	caaagaagtg	tggagtttct	ttcccttctt	5580
cttgagatcc	accaagacac	agattttccag	ctttgcaaaa	gcagaaaagca	ggcagaagga	5640
agatctccag	tccgcgggga	acggcagcac	ttttaaaact	ttgagattga	tgagtggtta	5700
attagaccct	cagccactcc	tatggtaagt	catgatggat	gccaaagacag	cagtaagggg	5760
tttgtatttt	ctttgttttc	ttccttgtgc	accaaagaca	cagagatgga	gctgggtctt	5820
tgt						5823

```
<210> 5267
<211> 355
<212> DNA
<213> Homo sapiens
```

<400>	5267						
gagccaccac	ccagcctttt	cattgattct	ttaattgaca	gttaatagac	atactcatgt		60
cccttatatc	taaagttata	accaaagctt	ttaacttctt	ctcggattgt	ccttatctag		120
taatgaacta	gtcaggaccc	caacaatgag	caggtggcag	gctcaaggcc	atttacagag		180
gatttgtttc	taacagtgtc	cattgcaaag	gtgcaggcac	gacagggggt	ggccacgagg		240
aacggtgcac	agtgcgaag	cccagggctt	gtagtggcac	agctgtcact	accatgagcc		300
caaagggaca	ggccaaggaa	gagagtgcc	gagcccagga	ggagagagga	gcctc		355

```
<210> 5268
<211> 36192
<212> DNA
<213> Homo sapiens
```

<400> 5268

tcttcctcagtc	tccctttaaag	cacagcccag	ggaaacctcc	tcacagtttt	catccagcca	60
cgggccagca	tgtctggggg	caaatacgta	gactcggagg	taggcatccg	tgggggggcg	120
ccggctcggg	cgtgcgggga	gtgtccgctt	ctgctatctg	cctctccaaa	tatcccgact	180
gctgccttgg	ccccagccct	ctctccactt	cggagcactc	ctctggcggt	ggcaccgctg	240
aggaatgggc	ctgggcgggg	aggtgaagag	aagccaggaa	tgttttatgt	tttcctaata	300
gagagggggc	ctaggggagcc	cctgagctag	gaggacacgg	aaaaggggat	tggggtcctg	360
agattgggtc	tgttggggccc	aggacgcgtt	ttctggatgg	gtctagggat	ctcccttgtc	420
gcgggacccc	cgcggtccgg	ccctgcctgc	tgggggttcg	aagaggtgga	gtgcagggtg	480
gaggtgttat	ttacccgagt	cctggcgaca	gtccccggga	ctctcccgga	ggcgcccgaa	540
ccggcaggtc	ccgcaggcgg	cgcgcggtgt	gtttgcactt	tccaaagttc	ttgaaccatc	600
tcaagaactc	cttctgcata	ttggcgctct	gcaggggtgt	tccgagagag	gtagacctcc	660
cctccccaaa	ctgccaccat	cacttccaac	gccctccacg	cgctggagct	ctgcccgggt	720
gtggaaacct	cgtcttccaa	cacgtagctg	cccttcagcc	acccgcccgc	agcctgggag	780
tgccctgagg	gtgggtcggg	ggagctgcgc	aggtgagact	gagttctagg	acatttaggg	840
ggtctggtgc	ctggctccgc	caaaaatggg	gactttcggg	attgtgatca	tcacggcgga	900
ttgagcaggg	agagccgtgg	agggacaaga	gagggccgag	gcagggtggg	ggg'gcggggc	960
aggtgcgagg	gggagtgcgc	caagaagcag	cgataaaagg	aacattccac	gggtcggggc	1020
gctgctgttg	gatcttagat	aaagttggaa	gggataaccg	gggcagggtg	aatagggacc	1080
ggggacggga	acgcgaaaca	ggtgaagcgc	tcagggcgag	agcagctcgg	cttagggagt	1140
ccggggagaa	cctgcggctg	ccccctcgcc	gccgaggtcc	tgcgggtcct	gcgggtcctg	1200
cgtgctgagc	cggggcgtgc	gcgggcgggg	gccttcggac	cgcgcggcgg	ggcctgcctt	1260
gacccctggc	ggcgggcggg	ggaggcaggc	gcgcctcgca	gagtacagag	gggtgtgggt	1320
tcctctgcga	gatcctctta	aaaagctggc	tacgcgcagg	cgttttctgt	gcacggagcc	1380
gtagctgtcg	gagcggtttag	ttcgatttcg	agctcgaggt	ttcccccgcc	gccaggctga	1440
cttctcatcg	cttgtttttt	tttttgcat	tttctcccca	ccgccgttgc	cgccctcccc	1500
gtcctggcgc	tcgcgcctcc	gccctctgca	gggacatctc	tacacggttc	ccatccggga	1560
acagggcaac	atctacaagc	ccaacaacaa	ggccatggca	gacgagctga	gcgagaagca	1620
agtgtacgac	gcgcacacca	aggagatcga	cctgggtcaac	cgcgacccta	aacacctcaa	1680
cgatgacgtg	gtcaaggtaa	gccaaaggca	ccaacaggga	agggtctggga	cagctctcct	1740
ctggcagtta	gcccgtgcat	ccttcttttag	cattgccgtg	tacgcacacc	ccaccccgcc	1800
ccctacacgc	gcacacacac	acacacacag	agttttgtgg	gtttgatgtg	tgggagctcc	1860
cgcagtcggc	agaaacgtta	catctccctt	cccccatctc	cccccaatag	ttagttcagc	1920
tgaaattcag	ctaaagttag	ttttgtagaa	gttctctata	ctacactttt	atcctagcaa	1980
atgagcctat	tgacctcagc	aacagacggc	ccatactcct	tgggacgggt	agatggttcc	2040
tatccattcc	caggttgaaa	gtctagtgc	aggtccccac	tgacagtggc	attaagacag	2100
tcagataatt	gtgtcaggtc	tttgtctgag	gtgtagtcag	aatacaagat	gggcagtgtc	2160
ccccaaacta	aacgatggga	agtgtatttc	ttaaaaatac	tacagtggat	ggaaatgcct	2220
aggactaaag	acaaagaaaa	tacgtactta	ttcatataca	tatgaaagtt	actttaacta	2280
gactaacaag	tcacttgtgc	acaactaagc	aaatttacaa	aacccaaaaa	aatgtatgcc	2340
tcttggtttc	ttctatctat	ggacacctgc	acttagatgt	ggaaaagctgc	ttcttttagta	2400
gctacctggg	tcagcctgcc	ctgagctaat	ggcacattca	ggttggagtt	ccttttcata	2460
ctttcaggat	gtgcttggtg	agatttaaaa	taattggact	gggttattgg	ccagacttag	2520
atctgactca	gtggtcagtt	ttaaattatc	attgttatta	gattttgacc	cttttagcca	2580
atctagtggg	aggaatttat	tgccataaca	catctggatt	gggatattcat	gggctagagc	2640
catccttggc	aaagggtttt	ctctgagaaa	tggagggtca	aggaaaaaat	ctggctcagg	2700
gactgcagtg	tgaagatcta	ctcctataca	acccccagca	atcaatgagg	cggatgagca	2760
atttcacacc	accacgcctg	ctatctatgg	atgggaggag	ctatagtcca	caaaccgttt	2820
acattcatga	ataatatatt	tcaaaagggg	aaacagttta	atctgtaact	ggaagggaaa	2880
aaaaaactgt	cagaattgac	tcccttgggt	tcctggagta	ggaaaaagga	aaattggagc	2940
atttgcagct	ttttttgact	agctggatta	tggaaatatt	aaaagcaaca	gcaacaaaag	3000
tacctataaa	actagaaaaa	agaatttgcta	aaaactattt	tactaaaaac	attaccttaa	3060
agggagagga	tatttggttt	ttccccacc	ccccaccttc	tcatttggtc	ttgaacaaag	3120
aggagagttg	ccaggaaaaa	aggcagattt	cagagagggc	tggcttcact	ggatcctccc	3180
tgttgttcca	ctgcactgtg	agtgaatttc	cctggagcaa	gcgaatctcc	cgggatgagt	3240
cagagaggcc	aacagtgtgg	atgtgggtct	ccacacatag	catgactaag	ttgagaaaag	3300
aaggcccccac	tgggaaaaga	gacttcaaca	cagatggaaa	aaaaacataa	caggcttgga	3360
ggaaatagca	gtttacaaaa	cagcattttca	aagagcaagt	gtgggggatcc	tcaaattaaa	3420
gaaattaaaa	gaaaaagcta	gagcaagctc	ctgctagcct			

tctatctac	atctttatgga	gactcctatt	ttataaatat	gtatcctcaa	gtccaagcac	3720
aaacaaaata	acagaaacag	ggatgattct	ctcccagttt	ccatgacagt	aaataataaa	3780
tttccctaaa	ttttactttc	aacaacatag	acttttttta	tttttatttt	tattttattta	3840
tttattttatt	ttttgagacg	gagtctcact	ctgtcaccca	ggctggagtg	cagtggcatg	3900
atctgggac	actgcaacct	ccacctccca	ggttcaagca	attcttctgt	ctcagcctcc	3960
tgagtagctg	ggactacaag	tgcacgccac	catgccgggt	taatatttgt	attttttagtg	4020
gagacggggt	ttcaccatgt	tggccagggt	ggtcttgaac	tctgacctc	aagtgatcca	4080
ctggtcttgg	cctcccaaag	tgttgggatt	acagatgtga	gccactacac	ctggccaaca	4140
acacagactt	cttaaaaaaa	tcatgacaat	aattttgggt	gcttcttaaa	agcacccaaa	4200
gctttactgc	taatgcattg	tagcttaaaa	cttcacataa	taagaaagaa	ccagtggcca	4260
atggaatcta	ctgttaaagg	tacccaatca	agtaaggaaa	agttggtcct	aaaagcaagc	4320
agccctgtaa	aagctgctct	gtccaatatg	gtaatcacta	gccatttgtg	tttccattta	4380
aattttcaagt	aattaatatc	aagtaaaatt	taaaattcag	ttccttagtc	acactagcca	4440
cgttgtgagt	gtgcaacagg	taaagctagt	ggcacagaca	tagaacattt	ccatcagcac	4500
agaaatctct	attggacagt	gccagattag	ggtgttctct	gcattgtaaa	agcatcccct	4560
tgccaagtta	aagaaaaaaa	caacaaaact	ctagagaaga	aatgaaacct	cagtttcatt	4620
cttggagagg	aaagaaaact	catgtgtggc	atgagtttat	attcaagaag	gtgcagcatt	4680
attacctatt	ttactagtaa	taatgcacac	cattatagta	tacaattccag	ttccaataaa	4740
attaattttct	catcttacta	aaagcttgct	gctccacatt	atgagacaat	ttacccaaat	4800
atagacattt	acccaaaaat	attaagtagc	ttgtgaatac	tttttaaaat	ttcctttaat	4860
taaagtggtc	acaaactcaa	acccttcatt	ctccctctga	gatttctgtg	tcattcttttg	4920
ttcacattgt	tattcacatg	tttattatgt	acttattttg	attttctaga	taaataaaat	4980
ggcttcaaat	ctataattct	gataaaatta	gccatcaatt	aattttattta	ttaaacccat	5040
gcaatatgct	agatttagatg	ctttgctatg	taattcctac	aataaatcct	agcaatcaca	5100
aagattacag	ttagttagagc	gacatgcaca	caggtaaaaa	gtgtttttta	aaaatacata	5160
catacaacca	aaacagtaag	tcactgctac	atggaaactg	attggtctct	tttctttttt	5220
tttttttttg	cttgactgcc	aggaagcagt	ttcaaactct	tagctggatt	ttaagtttca	5280
ttaattcatg	ttccacata	tggttctgta	ttttcacttc	ccccttttaa	ctgacatact	5340
gtcttatgtg	atctctactg	taagccttct	catcattttg	gaaacagacc	aaatataata	5400
tatatgataa	ggaatcaaaa	gtaatacag	tagtgttgaa	tattgcataa	caaaaagggt	5460
tttaaatagg	gaatggtatc	aatatgaagt	gttagggaga	cccagccatg	aaaaggtag	5520
cagggtcaga	gaaggaggat	gtattgcagc	tggtttaaatg	gagaatggta	tgaaggagg	5580
gcagtttgaa	ttgggtcatg	gaggacagat	ggattgcaaa	tagctggggc	aaaagcacag	5640
gaaggcatac	taaacgagcc	agggcatggag	acaagaatg	ctcccacagt	ggagttgtag	5700
tagctcaatc	agactgggat	ttgagatttc	atgtggcaga	gtggtagggt	ataaagggtga	5760
aaagactgat	catagtaaaa	tgcggagtct	gtaaaatccag	cactcatgat	aagtttggac	5820
atcatgtcaa	cagtggacag	ccataaatga	ctgcaagcat	cggtgtggta	taatgaagg	5880
gacgtttttg	taaaatgact	ctgggtgaagg	tacagaagg	aatgaaaagt	agccagtcta	5940
gttgagcaga	aaagagttca	gatgtaattg	catcatggtc	cagatgtgaa	atgaagacaa	6000
tgccaagtgg	cattgtggat	cgaacatac	atgcacaaaa	tgacagaatt	ttagaatttg	6060
aagggatcat	catggttacc	aggttggcct	ccaattcctc	ttttgtaata	ttaatagaaa	6120
ttaagggcta	acaagtttaa	aatgttatcc	atctttttac	atagttactg	cccaaagtga	6180
atattttgaa	atgtatcatt	aaagaagaat	agataagatt	atgtgattca	ccatggacta	6240
ttgtcatgag	aggaaaaaatg	tgttttagatg	attctgttag	cactgagaca	aatcaggata	6300
tctgaaagga	ggtctttgtt	gaaaaacaga	aatatgcatt	cataacttgc	ttttctaaaa	6360
ttggaatgta	atgattctta	aatatgcaca	gacacaaaat	tttctttaac	agtcaagaaa	6420
atgcacgcag	gtgataatca	gatcagtttt	ggttatagta	caaaggttta	atgcctccgt	6480
gatccctttc	aacttgaaag	cattctagag	caattgggtga	ttaatatcag	tataacagtc	6540
atttataaaa	ttattattta	tttgatatac	atctaataca	agcataagat	ttatttttat	6600
tattattatt	atactttaag	ttttagggtta	catgtgcaca	atgtgcagg	tagttacata	6660
tgatatacat	tggcatgctg	gtgcgctgca	cccactaact	cgttgtctag	cattaggttt	6720
aaaagatcag	attgtctcgg	caccatgtta	atatcttttt	ctgttggcat	tagtattagt	6780
tttgcttgtg	tattttgtta	ggagatagct	tcacaagttg	gtgattgata	ttctaccatg	6840
tatgaagtca	tgcgtggaat	tcagaatccc	cagcttgtaa	aattgcatta	tgatcatctt	6900
tagtgggaaa	ttgttctcag	aatactgagc	aaaggatgat	accaaaatgg	cagctattat	6960
tcattcttaa	gcatatgaaa	tgctttcagg	ttcaacccaa	aattacatac	attttaaatg	7020
cttactaaaa	gagtcctttc	cctcctccat	ctattaactg	caatcaaaaa	acttcggttt	7080
taactgaaca	tgatttcata	ttattttatta	aaatttaagg	caaggtgcac	caagtaccct	7140
tgaattatga	aaagcttcat	gatgtgggat	attctttc			

ctttcatatt	ccaaatgaaa	ctgcttttta	gtttgccta	cttttaaaaca	taactctttg	7380
tgatggaatg	accagaaaca	gctgggtctct	aagaggacag	ggctatgtgc	gctcacctgc	7440
gggggttgac	cttcataat	ccccctggct	gtggggaaag	ttgagggtg	ctgtctttat	7500
acaaagatgg	tttattccaa	gatacacaca	ctcttcttcc	acaccctgga	gaccttgcat	7560
atttagtata	ttctttacca	taatctgagg	ccctagagaa	aaagatttgc	aaactatact	7620
tgttttaaaa	caactttcta	aaaaagacac	tctcagcccc	tagaaattat	gcctaacaca	7680
tagatgctca	gaggcaacct	gttgtagtgc	aagaggattg	tgccaagatt	agaaaacaaa	7740
tatttgcaac	ttttgtaact	gtcttctcta	aaacttgaat	gtggtgattc	taaagtaaag	7800
accgacacaa	aattcttttt	cttttagcagt	caggaaaagg	catgcatgaa	gtaatcagat	7860
cagggtgtgg	ttcagcataa	tggcctaagt	ctttcatgat	ctctttcaac	tggaaagcgt	7920
tctagtccca	ctggacacca	aggaggaaga	agggacggaa	aatattaggc	ccatagggtt	7980
atcttcctca	gtagtccacg	agatttgagc	ttatatgtag	ggagcaaaat	tgtttgtcta	8040
aaagcagtta	ataaatgccc	caaaaaggct	gggcgcagtg	actcactcct	gtaatcccag	8100
cactttggga	gctcaagatt	ggtggatcat	gaggtttagga	gagcaagatc	atcctggcca	8160
acacggtgaa	accccatctc	tatgaaaaat	acaaaaatta	gctgggtgtg	gtagcgcgtg	8220
tttaattccca	gctactgggg	aagctgaggc	aggagaatgg	cttgaacca	ggaggccaag	8280
attgcagtga	gccaaagatt	cgccactgca	ctccagcctg	gtgacacagc	gagactccgt	8340
ctcaaaaaat	aaaataaata	aaataaaata	aaataaaata	aaataaaata	aaataaaata	8400
aaataaaata	aaataaaat	aaaatgaacg	ccccaaaaat	attttgggca	aactattttg	8460
tgtttctttt	ctttatttat	ttatttcttt	tgagacaaaa	tcttgctctg	ttgccccggc	8520
tggagtgcga	tggcacaaat	ttggctcact	gtatcctcaa	cctcctgggc	tcaagcaact	8580
cctgagtaac	tgggaccaca	gggatgtgcc	acaattcccg	gctaattggt	ttagccagga	8640
tataaatgct	gcctacatag	agtttgtagc	tatctccttg	actttcttta	tgcagattcc	8700
ttcacaact	tttgatggat	tcctttacca	aattctactg	tctgttaaaa	tcttctatct	8760
ttatatcttt	agtcacaaca	acacgtcatt	tataaacctt	aaaattgttt	ctggggcaat	8820
aaacaaggca	aaataggaat	atataatttt	aggcaattta	cttctgtttt	ggtctcataa	8880
aaaattgtaa	ttaaattgta	gaaaatattt	caattcctct	ttaatatcct	ctcctcacat	8940
actggctctc	aactttctaat	cctcctattg	aaacattgat	tgggaggcca	aggcaggcgg	9000
atcaactgag	gtcaggaggt	tgagaccagc	ctggccaaca	tgggtgaaacc	ctgtctctac	9060
taaaaataca	aaagatttagc	tgggcatggt	ggcatgcacc	tgtagtccca	gctactttgg	9120
tggctgaggg	acgagaatcg	ctttaaccgg	ggaggcagaa	gttacagtgt	gccaagatca	9180
agccactgaa	ctccagcctg	ggcgacagag	tgagactcca	tcacaaaaaa	ataaaaaata	9240
aaattgaaat	ttgcagcctt	tttaaaaccc	catagcctct	ttataaaccc	aaaagcacta	9300
tcaaattttg	cgaggtgtca	aaagaatcag	aggaatgttt	acaaatacac	atgcctgggc	9360
ccacctcaga	tatatatata	tatatatata	tatatatata	tatttttttt	tttttttttt	9420
ttttgagacg	atgtcttgct	ctgtcaccca	ggctggagtg	cagtggcatg	atctcagctc	9480
actgcaagct	ccgtctcccg	ggttcacgcc	attctcctgc	ctcagcctcc	caagtagctg	9540
ggactacagg	cgcccgccac	cacggctggc	taattttttc	tatttttttag	tagagacagg	9600
gtgtcacctg	gttagccagg	atggtctcaa	tctcctgacc	ttgtgatccg	ctcgctcgg	9660
cctctcaaag	tgctgggatt	acaggcgtga	gccactgcac	ccggcccaga	tatatataat	9720
tagaatatct	agagggtggag	cctgagtatc	tgtatttttc	agagtttcaa	atgatcgttc	9780
ttcaaatgat	tacactgtga	agtcagattt	agaaatgact	gtacccaagg	ttggctaaaa	9840
gatacacacc	ctgggttgatt	ctacctgaag	agagcaaaata	agatacacag	caaagttgta	9900
gatgtttttc	ctgccagtag	aatacttgcg	ggttaggcca	tttaaaaccc	tgccagagag	9960
ttttgaaaca	ctgtggaggg	ctcccaaatc	aacttgctca	atggttctcc	atcccttcag	10020
gctacttggg	cttaaagcca	actgcaagct	tagagcctca	gagtgcacta	ggaatggggg	10080
gaccatatat	tctaggttgt	ctcatacaga	ctagccagca	ctactcagcc	gcaagtaata	10140
gcatccaggc	atgctcagaa	gtgtcccat	tggaggaaaa	aaacaatatt	gtcacaaatg	10200
aattggcaat	ggcctgtctc	tgattcttat	acctggaata	tactggaagt	ccctactcat	10260
gctattttct	agcagaatag	gcaaaatttc	tacattccag	gcatgtcagg	cctttccctg	10320
attcctttct	ctaattgtac	tcgtctgctg	tcttttatca	cagccattaa	actgcaccct	10380
aacttaaaga	ggatccctta	tgttccaatc	tactcatccc	tcagatcttt	ctttctctga	10440
aacacagggt	taatgagact	gacatccttc	catcacatat	tttctcagct	actcagtaaa	10500
agatgtaaat	gtttaaaata	gtttaaacta	tttttcagtt	agtccaggaa	acataaaatg	10560
gcatgcttgc	acataaacca	ttgttttagg	tgggggaagt	gtttttaatt	ttgccttaaa	10620
ggaaatctgc	atgatccaca	ggctatgcaa	ctaccaaggg	aattagttgg	tagaacagaa	10680
ttacacctgc	acagaatata	aatttcctgc	ctttcatggg	aactatgttg	atgtttcaga	10740
tatgaaatac	atcttgtttt	ctttattgaa	cctcgagaag	atgtctcttg	ttggtcatta	10800
tttcatggca	ggggaagtac	atattcctaa	agacacaacc	gagtttccct	ttaaccatca	10860
ttagttgggc	tggccattaa	gaaccagacg	cttttatttt	caaagagact	taagttttga	10920
tgttgtacat	atgtgcctaa	tattctatct	catagcaatt	taaagggtgac	gttttaaaaa	10980

gtatatttaa	aatatttggt	atttagactt	tttttttaag	tctccaggtt	gaggaggaca	14700
caaataatc	ctcctaaacc	ttccagtaag	caagctgtgg	catccagatg	atctcctggg	14760
tcatggggga	taaggcta	ctcctaggtg	tctggcagac	aggacaggca	aattcccaga	14820
atgccaaaat	ataccatctg	ctgctgtttg	gcattgccct	taagtccaga	gtgtggaggc	14880
tgggggtggg	tctctggcta	caggagaagt	cccctggcaa	gggaggggtg	aaaggagtgc	14940
ctggtgaacc	ccccatctat	ccccgcacta	tggcaagatt	gagaggaatg	actagatcag	15000
ggaatggccc	gaaagaaaaa	tccaaaacct	cccaaccctg	gacaaggcca	cagctttgag	15060
aaaccgaagc	ctctgcttcc	ttctctttgg	ctttactgct	tctagatgca	aatacacaga	15120
gctctgagat	ttgtgtgct	gggaggtgat	aactgttaac	cctctattcc	aatagcacag	15180
aaattttctt	ttgcctcaga	agtgtgttct	catagatctc	agatctcttt	tcaggaaaaa	15240
gaaaaacaac	aacaataaca	acacattaat	gactctgaaa	gagtcagaca	ccattaattc	15300
cattattggg	gtctgtgcca	agtgaatga	acgtcagctc	ttttcccaga	tatgtttcct	15360
tcttttgcct	cctataataa	gagatgattt	tactgtaata	atataagact	catcaatttg	15420
actccaaata	gcttttccat	caacaggcta	agtgtaaaat	accaggatca	ttattcagtt	15480
gagaatagat	agaactagga	agtagccatc	aaaaaagaat	gatgaggtgc	attgtggatt	15540
tgggggtgta	cttggtatct	aacatacagc	cagaatcaca	gtcatagcac	acttaatat	15600
ttatcagaaa	cttgcgtaga	caagttaaga	ggactctcaa	cttaaaaatg	acaccaattg	15660
caatgatctt	gttaacattt	gtgatgaaaa	taatagcaaa	gtgacttaga	caaattacaa	15720
tagcccataa	aaataagata	aagttaaaca	caaagtaaga	tgatgttaaa	agacttgaaa	15780
taaaacagat	atgttaagta	ggcaacacat	aggtaagcat	ataaaaacaa	gaagatacca	15840
ggatagagct	gtcatttttg	tgggagcctg	tgatgtggaa	aaccaagatg	cctgggtgag	15900
ataatggata	tggaaacccc	ccttgtaata	attccacagt	tccaaggggc	caaggctctc	15960
aggttgagtc	actattgtaa	acacacccat	agatgaatcc	acatgccata	cctccttgag	16020
taagtgggga	ctcaaactag	gtctgtcaat	tgttccagaa	aattaagcat	ctaaataatt	16080
taatgataat	ttaaaagaag	cacaatgaaa	tatttcaagg	aatgtcacat	acaagattct	16140
gtacctcttc	tgctttgggt	agactcaatc	agaatagggt	cctgctttga	tcttaagagg	16200
gaggtagaga	ttctgggaaa	gccctaggga	agagcaaaag	gaaaggaata	aggagccaag	16260
aggaaaccca	gggtaaggct	gaggagggac	tgtttcgtgt	agggtattta	ttggaagggt	16320
tggaaaggaaa	catggaatga	caattacctt	tggttattgt	cagggttagta	tgagacttac	16380
aagaaaagca	ctgctcagac	gcaattacca	ttcaagataa	gaaataatag	gaaaggctag	16440
cacacttagc	tttttattta	aaaaagtggt	aggtaggctg	agcacggtgg	ctcactcctg	16500
taatcccagc	actttgggag	gccaaagggt	atagatgact	tgagcccaga	agcttgagac	16560
cagcctggac	aacatggtga	aacctcatgt	ctacaaaaaa	atacaaaaat	tagccaggca	16620
tgatggcatg	cacctgtagt	ctcagctact	tggggggcca	agagggtggg	agattgcttg	16680
agcccaggaa	gtcgaggctg	cagttagcca	tgattgtgcc	actgcatgac	agcctgggca	16740
accgagttag	agcctgcctc	aaaaaaaaaa	aaaaaaaaaag	tgttaggtga	catgagagaa	16800
gatcttccaa	gtaataagag	tggctaattc	caggaatgtg	tcaccagagg	ttatttttga	16860
atagtcgtgt	gttaaattcc	ttatttgtct	atataacttc	tcaaatcctt	ctgcctctac	16920
agttatagtt	taactggcgc	ataacagcct	tcacacacag	cctcataatt	aaacatagac	16980
atacatatga	acactttccc	ctatgccagc	aggatacttg	gtttgtttag	gggcaaagag	17040
gaattgatgt	ggcgttgttt	caatcagtg	ttgaaaatgc	aagtggtaaa	cattgaaaaa	17100
tagaacactg	caaaaggcat	gcattgtata	tacaaaaagg	tcagcatgaa	gcattatctg	17160
tatggcaagc	ctgcccatcc	actccctcct	acacgttgca	tattcacaca	gttttgcagc	17220
ttgtataaac	ccctattgtg	atagaaactc	atgaaagagt	gtggtctctg	cgaaagctgg	17280
ctgttctgtg	aatttagacc	agtgttctct	caccctggct	gcaaatcatc	tggggaacat	17340
ttaaaaacac	tgttttaaac	accccaaccc	tagaaattct	gatttaattg	gtctgtgggt	17400
gggcccagaa	ctctgtattc	tttttttaag	gctctcaggt	gctgctaatt	tatagctaaa	17460
attgggtctg	gtttagactc	tcagaatttc	ttaataatta	aacactttat	catgacaaga	17520
ctttcaggac	cttaaaggcc	acagtggggt	agttatcatt	tactagggtc	ctcatctggg	17580
gaggtccttg	gcatttttat	tggaaatata	ttgtcactca	aatttctatt	acaaaaaatt	17640
ctttcttgga	cactgcttta	gcaactacat	gagatatact	ttgtacatag	cacaaatctc	17700
atatcactta	tgtaatccag	ctctgtgggt	ccttccttct	ctttgcctgt	ttatttttaa	17760
ttcttcccaa	gaggaagctt	agccaggtag	aacaccagag	tatcatcccc	ctcccccttt	17820
tcccacctga	gttcatggct	tagacatact	aggaaatgaag	ctgacaacat	gcactagtgt	17880
ttttcgaaat	tatgcagcaa	aattcccaaa	gtgcgagtg	ccacagagat	cttcacaggg	17940
cccaggggaca	ggcagacatc	attctttctc	cagttcctgg	cacagaaaag	agaccttagg	18000
ttactgagaa	gataccagtc	cctcctcaga	gcagacaagg	aaactgagcc	tcagaatgaa	18060
agactgaatt	tcagtccttt	cttgaacatg	gacctccagg	gttatatttg	gccttggaag	18120
aggcacttac	actctggact	gtagtttctt	catctataaa	atcaagaggc	agaaacagag	18180
aatctctaag	ttgcctttat	ttataaaatt	ccgagattct	agttgaccag	tattcataca	18240
agagttgaag	cctgtaagag	tgcaaaaagc	ccacacaaag	agacagtgga	agacctctca	18300

tacagtagtat	ttttattacc	ctcttcctag	gttttaccag	tcaacatcct	cactgttaat	18360
atacagaccg	tggtatttaa	ttaaatcatc	tttgaaatac	tgagctatca	acagatggca	18420
tgctgaatgc	aaaaggacca	caaataaata	tttggtactg	aagaagatca	agagttggag	18480
ttcatttccc	attctgatct	gggctcagaa	ctctgtggtc	ttccctctaa	tcatccttgc	18540
caccaaattg	gctgtatctg	ttctaagatg	gatcagaaaa	tcagttccaa	agttggctac	18600
aaacttttcag	gtttgggttt	tgttttgttt	ttttgttttg	ttttgttttg	tttttgcaac	18660
cagccaattc	atcttagttc	acatgacaga	gaagtgcata	attacttgca	actttagtta	18720
gagcagtggc	cttaagaagg	tctagctaaa	taaaaagtgc	tcagactttc	tgagtgtcta	18780
cagttgtcaa	attcacctag	ttcacatggc	cccatattcta	tcgtttgttt	tgttttgttt	18840
ttgtttttta	acagcccatc	tgtgagcaat	aggatcagat	gactaagagc	tacagggcag	18900
aaacactgtt	acttagagtc	aaattttccc	attacctagc	tgtaaagagt	ttgtttctct	18960
ctgactcata	taaagtttac	catttaggcc	cctgcgatgat	tttaattcca	tcacttaaca	19020
cccagccat	atgattctga	aggtaaacad	gaaggcggtt	gaattccaga	ccacctaaac	19080
attcttaagg	aatcatcat	ctccacgggc	agagctatgc	caaaatctgt	aggttttaac	19140
tcaaatttca	tgataagcaa	aaattgaatt	aatttgtctt	ccatttttgt	cacctttttg	19200
ccaaaattat	gcttgatta	gaataataaa	attcaactca	tgaagtcaat	cactaattct	19260
tacgccagat	aataaacat	tcagaattct	cccttccctg	ggagatttta	tcagggttagt	19320
gttcttgtaa	acaggagaaa	gagaaaaata	taacttagta	aatagcagta	ttcactaatt	19380
cattcattta	ttcaacaaat	attaattttac	tacctactac	attccaggga	gcttagagtc	19440
tagtatcaga	aataataacc	acacacacac	atacacacac	actacattaa	ataaggatgt	19500
gataggctag	atgaaataaa	taaataaata	aaagggtccag	gtgagaaaag	aagggtggggg	19560
ctagaaagaa	gtcattgaag	aaaaaacatt	taggttaaaa	cattatgaat	aacttagagt	19620
gagccaagtg	cagagtgtct	aaggagtgtc	ccaggcaaaa	tcaacagcaa	atggggagtc	19680
cttgatgtag	aaaaggggtt	gaggaattgt	cctgggagaa	atactcaaga	ttccagctgc	19740
aattctagag	gttagtgatt	tagagaggca	agtcagaaaa	tgacttccct	tcttacctta	19800
aaagtaagtg	caccatagaa	ggaaatcacc	cttccctggg	aataattcct	gagtgagcct	19860
gagaagccag	aggccatctc	tattttatag	gcactgtccc	cttttcagtt	acccatggct	19920
agctcattga	ccttgtcctg	gtcgtttcct	catttcactt	actccatcct	caaaacgtag	19980
acgcttcata	aatattgtat	aaatgaatga	actcacaaag	tcacagtaca	gcaaggcaaa	20040
agtgcctgca	ataaacaagc	attctagggt	agaaatattt	ctcaacttca	aatttgtgtc	20100
tattacattg	tattccgatt	ttctagagtg	gtagttctca	gtcaagggaa	agtttttctt	20160
cccttccagg	ggatatttgg	cattgtctgg	agatagtttt	agttgtcacg	atttggggga	20220
tgcttctggc	tcaacttggg	tagagaagcg	gggagtctta	taatcatcct	acagtgca	20280
ggacagtacc	cccaccaca	ctccagtaat	gaagaatcat	tagacctaaa	atgttaatgg	20340
tgtcaggata	gaaaaaccct	gttgtagagg	ttgggggactg	cgtcttgaca	gccacattat	20400
acagtgtatc	aaacaattct	gtataatggg	ctgtaattat	ccttgcctag	attttgcaag	20460
aaccctagtg	tgtatctttt	tcttacttgc	ccaagcaatg	ttcaaacctg	cagagattta	20520
tttcattcat	tttctgtgtg	tttagtaaac	agactagaag	cactggagga	aaaaatatte	20580
cagcaatgag	gtaagacgaa	agctattagt	aaccctagtt	taacttagct	gaatagtagg	20640
aaacaacctc	taccgtgagg	aagtgtattg	tagaaaactga	aaagacgcta	atgatgttta	20700
aaaagctgta	gttcaaacaa	atgtgcgatg	agaccaatgg	gtagactgaa	aatgatgaag	20760
acatttccgt	ttcttgtgtc	tttgatagaa	aagaagaagc	ttttattttc	tttagtggg	20820
caatcattca	gatttgtccc	atgacatgcc	cagaagggtt	aagaataaca	aactcccaag	20880
tgtaaacaca	gaatttagcg	aagaatccag	gcctctggat	gaatccctgt	aattgcatgt	20940
ttggataaaa	taagattttc	atacattaaa	caaggtagga	tttttctatc	tgggacggaa	21000
ctttcaacac	ttggaggggt	tgtagttatt	tctcctcaaa	gatggcaaac	atgagtgcc	21060
cgagttatcc	ctcctctctg	ttcaagttcg	ctaactaatc	accagtatc	catgctatcg	21120
ctggcccttc	tgtggcctat	ttttatactg	ttcactgttc	agtgtcactt	gtttggtaac	21180
actcaacatc	aacatgtgct	accaaattga	caccagagga	caaaaaagaa	tcaagatatg	21240
tacagcctgc	tttgtactga	gccagctgcc	actagatgtt	ttttgtgata	atgaacacgt	21300
gaggccatgt	ggacgcgaga	gatggctccg	ggttccctca	caggctctac	agccagctgg	21360
tctgcagtgc	ggtttttagat	tccgatgtgg	gaaccccata	aaaaagaata	tgcaggccag	21420
gcgtggtggc	tcatgcctgt	aatcccagca	atttggggagc	ctgaggcggg	tggatcacct	21480
gaggtcagga	gttcgagacc	agcctcgcca	acatggtgaa	atcctgcctc	tactaaaaat	21540
aaaaaaaaaa	aaaatttagtc	aggtgtgggtg	gcggatgcct	gtaatcccag	ctacttggga	21600
ggctgaggca	ggagaatcgc	ttgaacctgg	gaggcagagg	ttgcagttag	caaagatcgc	21660
accattgcac	ttcagactgg	gcaacaagaa	tgagactctg	tcacaaaaaa	aaaaaaaaaa	21720
agtctgcagg	ctgcataaag	aggtatgaaa	atgttccaga			

gccttccttg	tctctcctag	tttctggttg	tttgctggca	atgtttggca	ttctgtggat	22020
tgcagctaca	taactccact	ctgcctccat	cattaatggc	cttctgcctg	agtgttttca	22080
tatgaccatc	ttcatataag	gacaccagtc	atatttgatg	agggttccac	cctactccag	22140
tatgacctca	tcttactaa	ctacatctgc	aatgacccta	tatccaaata	aagtacacatt	22200
ctgagtgtct	ggggattaga	acttcaacag	agcttggtga	agggggcaca	attcaatgca	22260
taacaggatg	gaaactagaa	acgggtatgt	ttttatcagt	gtagaaagat	ttagcttaat	22320
ttttcaaagt	gtaataaaaa	ccccaggaaa	actcatactc	cctcctaaga	agagcaaaaag	22380
atggagaaac	ccgatggtta	ccttcaaaca	aaaggaaaagg	aggaataaga	tgaaaaggaa	22440
ttaatccaaa	gcaaagagag	tggcttatat	ggaatgttgg	tgcaactttc	tctgacacat	22500
ctgtgcactc	atcagctggg	gcatcatctc	cctgggggtac	atlttggtcac	tgtgtgcctc	22560
atggtaataa	actccagaag	cctcattgac	ttgctagaga	tgagctcatc	cttcttgctt	22620
gcttaatggc	aaaatacaaa	ataagcagtc	actgacatgg	aacgatttca	ggaatgccaa	22680
aagggttctcc	ttttccaaaa	tatctcttcc	atcttcccaa	tactgttact	gacatcacta	22740
acacctctcc	acttccgggt	gagacacctg	ggccagagct	cctgatgtgg	caggcagtg	22800
cctaaacgtt	ttgcataaat	taactgatgc	ccagagcaac	aaccctaaga	tataggtact	22860
atcataccgc	atcttacaga	taagaaactt	aggcacaag	agggttagta	gtttagatga	22920
gataaccctg	atgagcagag	attcgaaccc	agcctccatg	ctattaacca	ggacatcata	22980
ttgcctttca	tacatgctct	tcaaaggcaa	cacagtaatc	gattatcaca	ctcactcaca	23040
tctgattgtc	acatttttca	gatctgctct	cctagcagag	aatgaagcct	aaggtatcct	23100
tgtttctcaa	agtgtcctcc	ccagaccagc	tgcatacaaa	tgaggggatg	aggtgcaa	23160
gcctggaccc	tgcccttgga	gcactgattc	ataatctcaa	gtccaagaa	tctgcatttt	23220
aacaagcatc	cccagaaatt	tcttaagtat	actaatgtat	gggaaccact	gacactaaag	23280
aatggaata	aggggaacgt	acaatgttac	agtaaaccag	gaaaagccag	aaagacatga	23340
caacacagtg	aggactctgg	tagccaatgg	tcagtcaaat	gcccaggggc	cctggccaga	23400
agagagttag	gttgctgagg	agtaagagt	atgctgaatg	tgagggttg	agagcagaag	23460
gaagccagcc	agctatatcc	tcttgcttgg	atcacacacc	ctttccttgg	tggaaatggg	23520
tatttgacaga	gttagagaag	gcatgtttta	cagtttggat	ggcagggtatg	gatgtagaca	23580
ataaagagca	accagagtcc	atgggttcag	aatccccat	gtgtttctgt	ttgaatgaga	23640
cgcttgcata	aacagcacia	ggagtgtggg	gtgggggttaa	agagaatggg	gtggtatagg	23700
gagagctgaa	tgaggaactg	agagagcaaa	atcctgtgtt	tggttcaatc	actgattaca	23760
acctccctga	ggctcgggtc	cctaactctgt	aaaatggggg	gaaataatac	ctgccttgca	23820
ggtcctcaca	cacagggcat	gatgtgaatc	cactgaggca	tatagcactg	tgtaacatga	23880
gttattgcta	ttccaaggcc	cgtaaaaggc	tcttgccctg	gaatatatct	gccacaccaa	23940
tgcttgagct	ccattaatga	cacataaagg	acactggaga	taacgatgtc	ccttgttcta	24000
tgcactccct	ccaccatgc	cagaaaagaa	aacacagtca	cctgaagtca	ttctaagag	24060
tatgcctgcc	tcttttccctg	cacagacaca	tatacacaga	cacgcacata	cacagaccat	24120
gcacatacac	acacatggga	aaacatgagg	aaaagtggag	acaagaggca	ccaaaggaca	24180
aagtcacttt	tgtcgcctgt	cccttcccca	gcagggtctg	gcctgggctg	cttctcctgc	24240
ctcctccctg	aagccccctc	ctcatcatat	tccagtgcgt	gtccaccact	ttggggccag	24300
gtctacacaa	ctgcagtgat	tcagggtcacg	ggagaaaacc	caaacaagca	caaaacatgc	24360
ttcaacctat	atltttctaaa	ttgtttttct	ttaaagggtga	agacttctga	gcttgaatta	24420
tccccttgtc	agtgggcttt	ccatgctgtc	caagtgaact	aagtgataat	caacctccat	24480
ttcattttga	gaatgggttg	ggtatttttg	agctatgggt	aataagaaaa	tcatttaaaa	24540
taaaatgatt	tttattttatt	tattgttttt	atlttatttta	tcttaaatga	atltttaaatc	24600
atlttaaaata	aaataatggg	ataaaagagg	atgttaaaaa	taataaatat	atatgtatca	24660
aagtgtgctt	gtaataaccag	gcaaagaatt	aataagagat	aatattatgg	ttggtgaaat	24720
gttatgtatg	gctacatcct	ttcaatgagc	atlttatagtt	cctttaaaat	atgcctactg	24780
aagaaatatt	tacatgctaa	ttaacatgtg	catagtacca	ctagggtatta	tagaggatac	24840
cagatgtttg	tagtagacac	agaccttgcc	ctaagtcctg	gtcttgatgt	agtcactttt	24900
tagtcactac	aggtgactac	atlttagtcac	tacaagtgac	cttcccttcaa	tggggaaata	24960
aaggacttta	caaaagacgt	agaagacaat	tcttaatata	aaagtgattt	agatcttcac	25020
aagtlttgtga	agagaagcag	atgagtgaag	tagaacacta	tcaatgtaaa	atattattct	25080
gaggcctctg	taatgactgg	gaaggacaaa	gagggaagtc	atlttcagaga	gagaggctct	25140
aggttccaag	ctggatgctc	aggtcagtga	ctgcaggctc	cctccacacc	catcacccca	25200
caccctaacc	ctcttcagtt	gtcacaaaag	gtagataaat	accacatttt	ttgccctctt	25260
ccatcttgaa	accctggaaa	cccttgcttc	cgccagggga	ggttacttag	tatctgtcac	25320
ccaaggggaa	ccaacgtcga	agcccaagaa	taagagtcaa	tactcctacc	agagggtttac	25380
atltttccca	ggggtctagg	tggatattcc	tgggaacccc	cgtaaacaca	ggcatctaca	25440
gtacaatcca	ggcctcctgt	tttcagcagg	ggctgcaaga	gcactgcagc	cttttcccca	25500
gaggtgtcag	tttgggccag	taaagattgc	ccctgagaaa	acacatgggc	aattagagca	25560
aagttccctat	gttctggttaa	catttaattg	tgctatttct	caacctcctc	tgcacccaca	25620

cactcacaca	caacattttat	tccactgact	tcaaaggaag	ctcaacgtgt	taaaaatatg	25680
tgtgggaaca	aagaagggag	tttgaaattg	gtctaaactc	tgtataactg	ggtttgacac	25740
gtacattagg	atttttacaag	tatgtatttta	atctttttttt	aaaaaaagcg	tttacatagg	25800
gttcagaata	atgacaataa	atcaacatttt	ctattgtcca	tttgtgtgtt	ttcatagtaa	25860
ataatgctca	tttatcctta	accagtaata	catacttatg	ggcttaaatt	agcaaaaagcc	25920
tctcaaaaag	tagctccact	cattttatcca	ccagtggtcca	gatgccatcc	agcacatgag	25980
gagctcccag	aaaggagcag	ggaacaaaact	agggctgtca	ggagtggagg	agaaagaatg	26040
gcatatgcaa	aaaggagctg	taattaaaatc	caagggaaca	tggcacactc	tagtcttttg	26100
cacgagacaa	agggcaatcc	tggtaaaaaat	acagatcccc	aggccccacc	ccaaagagtc	26160
tgatctgatt	ctgaaatggg	gccgggagaat	ctgcatttta	acaagcacct	tcaccagggtg	26220
atcctttttgc	tgagaacccc	tgagaaatga	gaaccctgtg	ctagtgtctga	atggagcatt	26280
atattccaga	gttgaagtgtt	ggtgatcagt	tttccagatg	gagctgggtcc	ttggtgcata	26340
cctgggtata	aatccaagcc	aattcaggta	tatgagctga	tatttcaacc	gaaacactat	26400
ctatagccta	aatttttttct	aatatttctgt	ttggtatgaa	ttctagaaag	ttgtaaatgc	26460
tatattttct	tctcatctat	ttctggactt	tgtcccaaga	ccaaatccca	gggcatctga	26520
tagacattca	ttgcatacat	ttttctgtaa	acatgaaaac	tgaattgtct	aatagaaaag	26580
ggcaaggaag	tagaaaataa	gaaatcatca	tcagaagtgg	tttgttttgg	aattatattg	26640
tccagctgca	taacaaatca	cccccaaat	tgagtgcgtt	agaacaacaa	acattgatcc	26700
tccacagttt	ctgtgtgtta	ggaatcaaag	tgatttaatt	taatggttct	gctcagggtc	26760
tctcgggggc	tgcaatccag	gtctcaggct	gggatccttt	caaggctgag	ctgggggaaag	26820
atccatgtct	aagctcactc	acatggccga	tggcgggatt	cagttcctct	taggctgtca	26880
gactgagggc	ctccgtgtct	cagtggtttt	agccagagcc	ctctctcagt	tcctttccac	26940
atgggcctct	ccacagggca	actcacaaca	tggcagctgg	tttccagtag	agcaagcgag	27000
tgagagaaca	agaaaggcaa	gcaaggtgaa	tgtcccagtc	ttttgtaacc	tcactctaga	27060
agtgttaacc	catcactttt	gccattgttt	attattttaga	agcaaatcac	taagtccagc	27120
ccacaattag	agggatggca	ttacacaagg	gaatgaacac	cagcagacag	ggtcattgaa	27180
agccatctta	gatgtgtctt	atcgcactta	agtgtgattt	ttccagatga	aaagaatata	27240
ttaatattgt	tcagtcttag	tcgatgtgcc	atcccatttg	tgctttgcta	aaacttgtat	27300
caatgtaaag	caaacatttt	ctgatacaat	ttaggtagtg	tattgtggta	atagagacca	27360
gtagtgttga	aaagatatgt	tgaggtcaga	aattaagctc	atgtttctaa	aagaggagat	27420
atgtacaact	actatgcaag	ccaacaggaa	agagtgtttt	agaatgtctt	tctgtctacag	27480
gtaactaaaa	acctaacacag	ctgtggcttt	aaaataaagg	tatatctaag	tcacataagc	27540
aaaagtctag	gggtgggcag	ctgctggcat	tgtctcagta	gcttgataat	ggcaaaaagca	27600
gcatctcttc	tatttccttg	gccttctaata	catgcatgtc	acctcacaat	cacaacatag	27660
gcaacacctc	atatttctaag	caagatgaaa	agggcaaaaga	gtcatgccat	atgcctctgt	27720
ctcttttcat	aagggaagaca	aagcttccct	ggaagtcccc	tctagcagat	ttcacttaga	27780
tctcattggc	cagaactgag	tcacatgcct	gccttaaacc	aatcactcac	caagaagact	27840
aacattatca	tggcaagtct	aaaccaactg	tgactcatct	ctgaaatcaa	aggattatta	27900
ccattaccog	aatccatcag	gatcctgttg	gcagagaagt	gggactgtaa	attttgagca	27960
ggcaacaaac	aagtcttctg	taaacttctt	atgtgttgtt	ttttatgtgt	tctatatatc	28020
cagtagaatc	acaattttcca	ataacagtct	aaaaagatat	tttccaatag	aaacagaatg	28080
tgtaagatca	ttacttatga	aatcccaaat	gtacttaagg	tttcccttct	gaaaaatcct	28140
tattcaaaat	aaaatgtcca	gattttgaaa	cccagaaaag	attctatat	ttaaaaatcc	28200
tgtgcacatg	taaactgttt	ttcaaatatt	gccttcagat	acattgaaca	gaatgaaatc	28260
ttctgagatt	tactacatca	gccaaagtatt	atcaaaaaca	acaggacaga	ttgcttttct	28320
tgacgtctgc	tgcttgattt	gtgttaactc	atgtttctga	aattgtagta	tcataagcca	28380
atgctgcaca	aaggatattt	atgtcattta	taaaaatcta	gtaatgtaaa	ctgttaactc	28440
cttataaagc	atctgttgac	acacaaaaat	atcactgaag	tgcatttatg	cctttcttct	28500
ttaggtctgc	ataatacttc	cctccagaag	gccaagtgtg	tccataaatt	acagaacaga	28560
aagttgggtg	tgggaggaat	agctcaacct	catctgaggc	atcccactct	aagaaactaa	28620
tggcacctac	acctcttggg	cattgagttt	ttaagcccat	ttttaattct	tgttctgtct	28680
atattctaa	tgagcacata	aagtgtgtct	ccaagcaaga	ccagcccttg	tagaagggca	28740
agtgcagtca	gtcccctagg	aaacgggact	ggggagtgtg	cgtttcaatg	agagataaat	28800
caaactgatg	ctaaacatga	acaatgagcc	cattagagat	tgtgagaaag	aggcatcatc	28860
atccactcaa	caataggcct	gtgggacctc	ttgatagcct	gaggatgttt	aatttcagggt	28920
gcaggatatcc	agaatgtagc	agctagactg	atcaaggatg	tgtgatgaca	gcaagcagta	28980
gtggaagagc	ccaggagagt	tcctaagcct	gaattgcaat	cctgtgtctgc	cataaaatgg	29040
gaagatatata	ttggtccagt	catctgacag	ctttgggtcat	caatttctct	atctcatatg	29100
tgactctatt	gctttaagaa	tcccttttagc	tttaaatatc	tatgaatctg	ctgaagcagc	29160
tgtgctttga	ttgatgtgga	tctctgaaat	cccttaataa	caaagaccac	ttatttagcc	29220
gagcttttgt	ggattcagtg	cattctgaat	acatgtcaaa	atatacttgg	atttgtaaaa	29280

aatatcctt	cctgtttttt	tcaccataga	tagatgtaca	aaaatgtccg	tgttcacacc	29340
gtggaaagga	cattttctcat	aaactcacac	agagatacct	ttcaagtcaa	tgctttagaa	29400
agcaatgaga	gattttaaagg	agacctagag	atatgaatgg	agtaggcaga	gaaggtatgt	29460
gaggagaatg	atgtaacttc	ctagggaaaa	agtatgaagc	acaaggctgg	acatagacct	29520
gggaatcagg	aaatttagagt	tctaattgca	gcttttccat	tgattcactt	gggatcttga	29580
gaatatctgt	ctcatttttaa	tcatttctggg	ccacagtttc	catatctgtc	aatttagagta	29640
agagtcacctg	gctgggtgccc	caggattgtg	agaacatacc	attcagagcc	ataaaaatgc	29700
aatcagtacc	aataatgtac	tagtaccagt	acctaggatg	caaaacatcc	tagatactag	29760
gtgtcctaac	ttaaagtgga	aacattaaca	agagtaattc	tttgaatcat	caaactggga	29820
atatttttag	agcatatctt	atctgggtga	aaactaagca	aataagacaa	ttgtaaaggc	29880
ttgtgatctc	aggaatacaa	aggcaaaaat	gcgcagactt	gaaatatgac	aagtctctagt	29940
tttgtcactt	agcatctctg	tgaccttgga	taattttctta	acccccggca	gtattctcat	30000
ctgtaaaatg	ggaataatga	catgcacttc	agtgggttgt	ggtgaagatt	attacaaata	30060
gaaattagct	cttttgagcc	actgggtggg	tttaaattcc	cagcccttat	gtgctttgca	30120
gctgttagtt	cctctttatta	caattgtcta	tttaaaaacc	tagtcacagc	ccggtgcagt	30180
agctcacgtc	tgtaatccca	acactttggg	aggccaaggc	aggagaactg	cttgagctca	30240
ggcgttcaac	atcagcctag	gcaacatagt	gagacctctc	catctctaca	aaaagcaaaa	30300
aatttagccag	tgtagctatgg	ctgtagtccc	agctattctg	aggcgtgaag	ttggaggatt	30360
gcttgagccc	aggaggtcaa	ggctgcagtg	ggcagtgatc	atggcgctgc	actctagcct	30420
ggatgacaga	gcaagaacct	gtctccaaaa	aaagaaagga	aggaaggaag	gaaggaagga	30480
aggaggaaag	aaaagaaaga	aagaaagaaa	gaaagaaaga	aagaaagaga	gagagagaga	30540
gagagagaga	gaaagaaaga	aagaaagaaa	gaaagaaaga	aagaaagaaa	gaaagaaaga	30600
aagaaagaaa	gagaaagaaa	gaaagaaggg	agggagggag	ggagaggaga	gaaagaaaaa	30660
ggaaggaagg	aaggaagaga	gagagagaga	gagaaagacc	tagtcacca	aagcaagaga	30720
tttttttaaa	gctactattt	tttgggcatt	tactaatcat	attgctatgc	tctgcacca	30780
agctaagtaa	tttaataaaa	ttatctcatg	tactcctcta	aaactaatta	ctgctgtgta	30840
aatggaggta	gaagaaact	aagcttttatt	tctgcctcta	ttgtttcttt	aacctgcctt	30900
gcttcctttt	tcagttgcac	ctaattggct	gtacttttag	ttttctttta	aactgcctta	30960
aatttcaaag	actaaagcag	caataactaa	ctgaatatat	ttatataaca	tgttattttt	31020
gtcatgtttg	tttccacccc	tgagacctg	ctctaaattc	acttggaagt	ttgaggataa	31080
atcatgtctc	ctagcagttt	ctgaaaatgc	agtttctactg	aaaatgcagg	catccagaaa	31140
tttagtaagc	aacttaaaaag	aaagtgtaa	aatctcctat	gtattcattg	aaaaataatt	31200
tgaatttatg	cttagaaaaa	tagaattatt	attaagaaat	cttacacact	catgttttta	31260
aatatcttta	ctaaggacca	attgtgtata	tggtgtaa	ctgtcctcaa	agaacatgcc	31320
gggagaattg	ttgcagttac	cacagggtta	aatttggcaa	actctttttt	attaacgtgc	31380
cttttaatta	tgaatatagca	tactcacctt	agataaaatt	tgaaaaccat	ttttgtaaag	31440
tggtacaata	ttgaagaaag	ttgataactt	tcagaccaga	tttaagcctc	aaatctacct	31500
ctctttttacc	tggaacaactc	attagcattt	ctgaacctca	cattttttct	ataaagttag	31560
aatactatat	tatagagttg	ttgtcagtta	aatgagaaca	gtgtctgatc	acaactagtc	31620
aacaaatggt	cacaactctt	cccctcctag	gaaaagaatc	tcaaggcaga	cctgcttcgg	31680
gtctgctctg	taaagaggta	ggaatcctct	gctcccggta	aattgcttcc	taaccttctt	31740
tggtaataga	ctattttttt	ataaagggtga	tggatcattt	cccattatac	actcaaatg	31800
tggtgtccatt	tcagggcagt	catggatgac	caatggccat	cttttgacc	cagatataaga	31860
acacctgctg	tagtatttta	attctgcctt	caaattcctt	tacaaaacaa	agacatcttt	31920
aaaaaataaa	attcttttagg	tgtcttgtag	ttgaatgcag	gaaaaccaga	gccccttatt	31980
tttgatagtt	ttgggaagaa	tgtagtgtca	gaacacaaac	ccataataga	caaataattt	32040
gcacagaaac	ttcataaaaag	tattgacctg	atttgccatg	tatttgccac	cttttaaaac	32100
acacaactaa	atgtttaccc	tgtgtctaga	tccaaatggg	tgaagaaaaa	tgagtgacaa	32160
tacatctact	taagctcact	tacataattg	tggccatgcc	gtttttttca	cattacatta	32220
ttagaacatt	ggacaataag	tcaagaaaca	gaatgttcta	caaaaataac	tttaaaaatt	32280
ggtaagcatc	atgtgctttt	tccagaagac	attttttttt	gttgaatcaa	aggtggctct	32340
ttggcactga	ctagctccgt	ggagcatagg	cagtcctcat	tccctaattc	tgagctgcc	32400
tgagtcgctg	ctgtcagtc	tccacttggt	gggatttcaa	actgcattaa	atccccctct	32460
atagctgtca	ctgccaagca	gttgactgtg	ctctgtccta	cctttctgtt	ggtaattctg	32520
tttttaaatcc	tgtgcttcag	tgtagtttat	ataaatcttt	acagagggat	aaaacttctt	32580
gtaattaatt	gtttgggtga	acatgtacct	gggagagcta	ttgggaaagg	ggccaaattt	32640
gcattccagc	tcctttcatt	cccaccttg	agctaacc	gtcctgtgga	ttcttccctt	32700
agcatctctg	gaaccttctt	ttcttttctt	tttt			

aacctgtctt	tccagcctcg	gtgacacagg	tctattctgc	ctgagacact	tactatgaca	33000
cccttgcttg	ttcctggggc	tttgacacat	ttccaacgtc	ccattgttct	tcctctccaa	33060
atcagccaat	tgcccaagcc	ctgctcaaat	ctcccacctc	atgaagcctt	cttgatgcct	33120
cccagcacac	catgatctaa	tttctgaag	taattatgct	aattgggcat	ttgaagaatt	33180
gttaaccgat	tatcaactaa	ctgcccctta	acattgcatg	tgtagttgtc	ttcaaaggca	33240
gttaaattat	gtcatgttcc	ttacattgta	ctgagtgcct	cgtatcctta	tccatgtttg	33300
ggggttttac	tttaagtcaa	gaaatttaat	cacatccatt	tgggtttctc	tagagctgta	33360
gttctcaacc	ttttgtgtgg	tagagaaaca	cctagagAAC	atgtttaaaa	atatcctggg	33420
ttccaccctt	gagagataat	aagggtccaag	gggaaccCAA	atatctgtgt	ttcaggtcag	33480
cttattggct	catcctatta	taccaactcc	tcagaaggcc	aagggtgggtg	gattccttga	33540
tctcaggcgt	tcaagaccag	cctgggcaat	atcgtgagac	tccatctctt	aaaaaaaaaa	33600
aaaaaaaaagga	ttagccaagt	gtggtggcat	gaacctgtgg	tcccagctac	ttaagaggct	33660
gaggcagaca	gattgcttga	gcctgggaag	tcgaagctgc	agtgaagccat	gatcatgcca	33720
ctgcaactcca	gcctgggtga	cagagcaaga	ccctgtctca	aaaaaataaa	aatgaaaaaa	33780
atctgtgttc	ccaagttcca	agtgatgctg	atgctgctgg	ttgcctttaa	gcactctaca	33840
aagaacgaac	tcataaatgc	taatacagta	tatgtctatg	gatactgaat	agtgggtttt	33900
ttttctcttt	tcttctattc	tgtgctcatg	ttgtgtcact	tcttcctttt	agattgactt	33960
tgaagatgtg	attgcagaac	cagaagggac	acacagtttt	gacggcattt	ggaaggccag	34020
cttcaccacc	ttcactgtga	cgaataactg	gttttacgcg	ttgctgtctg	ccctcttttg	34080
catcccgatg	gcactcatct	ggggcattta	cttcgccatt	ctctctttcc	tgcacatctg	34140
ggcagttgta	ccatgcatta	agagcttcct	gattgagatt	cagtgcacat	gccgtgtcta	34200
ttccatctac	gtccacaccg	tctgtgaccc	actctttgaa	gctgttgagg	aaatattcag	34260
caatgtccgc	atcaacttgc	agaaagaaat	ataaatgaca	tttcaaggat	agaagtatac	34320
ctgatttttt	ttccttttaa	ttttcctggg	gccaatttca	agttccaagt	tgctaataca	34380
gcaacaattt	atgaattgaa	ttatcttggg	tgaataataa	aagatcactt	tctcagtttt	34440
cataagtatt	atgtctcttc	tgagctattt	catctatttt	tggcagtctg	aattttttaa	34500
acccatttaa	atttttttcc	ttaccttttt	atltgcatgt	ggatcaacca	tcgctttatt	34560
ggctgagata	tgaacatatt	gttgaaaggt	aatttgagag	aaatatgaag	aactgaggag	34620
gaaaaaaaaa	aaaaagaaaa	gaaccaacaa	cctcaactgc	ctactccaaa	atgttggtca	34680
ttttatgtta	aggggaagaat	tccagggtat	ggccatggag	tgtacaagta	tgtgggcaga	34740
ttttcagcaa	actcttttcc	cactgtttta	ggagttagtg	gattactgcc	attcacttca	34800
taatccagta	ggatccagtg	atccttacaa	gttagaaaac	ataatcttct	gccttctcat	34860
gatccaacta	atgccttact	cttcttgaaa	ttttaacctt	tgatattttc	tgtgcctgaa	34920
tatttgttat	gtagataaca	agacctcagt	gccttctctg	ttttcacatt	ttccttttca	34980
aatagggtct	aactcagcaa	ctcgctttag	gtcagcagcc	tccctgaaga	ccaaaattag	35040
aatatccatg	acctagtgtt	ccatgcgtgt	ttctgactct	gagctacaga	gtctgggtgaa	35100
gctcacttct	gggcttcac	tggcaacatc	tttatccgta	gtgggtatgg	ttgacactag	35160
cccaatgaaa	tgaattaaag	tggaccaata	gggctgagct	ctctgtgggc	tggcagtcct	35220
ggaagccagc	tttccctgcc	tctcatcaac	tgaatgaggt	cagcatgtct	attcagcttc	35280
gtttattttc	agaataaatc	acgcttttct	gaatccaaac	taatccatca	ccgggggtgg	35340
ttagtggctc	aacattgtgt	tcccattttca	gctgatcagt	gggcctccaa	ggaggggctg	35400
taaaatggag	gccattgtgt	gagcctatca	gagttgtctg	aaacctgacc	cctgctcagt	35460
aaagcacttg	caaccgtctg	ttatgctgtg	acacatggcc	cctccccctg	ccaggagctt	35520
tggacctaat	ccaagcatcc	ctttgcccag	aaagaagatg	ggggaggagg	cagtaataaa	35580
aagattgaag	tattttgtctg	gaataagttc	aaattcttct	gaactcaaac	tgaggaattt	35640
cacctgtaaa	cctgagtcgt	acagaaagct	gcctgggtata	tccaaaagct	ttttattcct	35700
cctgctcata	ttgtgattct	gcctttgggg	acttttctta	aaccttcagt	tatgattttt	35760
ttttcataca	cttattggaa	ctctgcttga	tttttgcttc	ttccagtctt	cctgacactt	35820
taattaccaa	cctgtttacct	actttgactt	tttgcattta	aaacagacac	tggcatggat	35880
atagttttac	ttttaaactg	tgtacataac	tgaatatgtg	ctatactgca	tactttttta	35940
atgtaaagat	atttttatct	ttatatgaag	aaaatcactt	aggaaatggc	tttgtgatct	36000
aatctgtaaa	ctgtgtatct	caagacatgt	ctgttctaca	tagatgctta	gtccctcatg	36060
caaatcaatt	actgggtccaa	aagattgctg	aaattttata	tgcttactga	tatatttttac	36120
aattttttat	catgcatgtc	ctgtaaaggt	tacaagcctg	cacaataaaa	atgttttaacg	36180
gttaaacagt	ca					36192

<210> 5269
 <211> 36192
 <212> DNA
 <213> Homo sapiens

[illegible]

2397

gaattttggca	gtctcactca	gatgcctggc	ctagagggga	cttcagagaa	tgccctacag	3600
agagacacca	agactacaaa	tgcaaattct	gccccaggag	tgccctggccg	atgaacaggg	3660
tcctatctac	atcttatgga	gactcctatt	ttataaatat	gtatcctcaa	gtccaagcac	3720
aaacaaaata	acagaaacag	ggatgattct	ctcccagttt	ccatgacagt	aaataataaa	3780
tttccctaaa	ttttactttc	aacaacatag	acttttttta	tttttatttt	tattttattta	3840
tttattttatt	ttttgagacg	gagtctcact	ctgtcaccca	ggctggagtg	cagtggcatg	3900
atctgggatc	actgcaacct	ccacctccca	ggttcaagca	attcttctgt	ctcagcctcc	3960
tgagtagtctg	ggactacaag	tgcacgccac	catgccgggt	taatatgttg	atttttagtg	4020
gagacggggt	ttcaccatgt	tggccaggct	ggctttgaac	tcctgacctc	aagtgtatcca	4080
ctggctcttg	ctcccaaaag	tgttgggatt	acagatgtga	gccactacac	ctggccaaca	4140
acacagactt	cttaaaaaaa	tcatgacaat	aattttgggt	gcttcttaaa	agcacccaaa	4200
gctttactgc	taatgcatgg	tagcttaaaa	cttcacataa	taagaaagaa	ccagtggcca	4260
atggaatcta	ctgttaaagg	tacccaatca	agtaaggaaa	agttggctct	aaaagcaagc	4320
agccctgtaa	aagctgctct	gtccaatatg	gtaatcacta	gccatttggt	tttccattta	4380
aattttcaagt	aattaatatc	aagtaaaatt	taaaattcag	ttccttagtc	acactagcca	4440
cgttgtgagt	gtgcaacacg	taaagctagt	ggcacagaca	tagaacattt	ccatcagcac	4500
agaaatctct	attggacagt	gccagattag	gggtgtctct	gcattgtaaa	agcatccctc	4560
tgccaagtta	aagaaaaaca	caacaaaact	ctagagaaga	aatgaaaccc	cagtttctatt	4620
tctggagagg	aaagaaaact	catgtgtggc	atgagtttat	attcaagaag	gtgcagcatt	4680
attacctatt	ttactagtaa	taatgacaca	cattatagta	tacaatccag	ttccaataaa	4740
attaattttct	catcttacta	aaagcttgct	gctccacatt	atgagacaat	ttacccaaat	4800
atagacattt	acccaaaaat	attaagtagc	ttgtgaatac	tttttaaaat	ttcctttaat	4860
taaagtggtc	acaaactcaa	acccttcatt	ctccctctga	gatttctgtg	tcatcttttg	4920
ttcacattgt	tattcacatg	tttattatgt	acttattttg	attttctaga	taaataaaat	4980
ggcttcaaat	ctataattct	gataaaaatta	gccatcaatt	aattttattta	ttaaacccat	5040
gcaattatgct	agatttagatg	ctttgctatg	taattcctac	aataaattcct	agcaatcaca	5100
aagattacag	ttagtggagc	gacatgcaca	caggtaaaaa	gtgttttttaa	aaaatacata	5160
catacaacca	aaacagtaag	tcactgctac	atggaaaactg	attggctcctt	tttcccttttt	5220
tttttttttgc	cttgactgcc	aggaagcagt	ttcaaatcta	tagctggatt	ttaagtttca	5280
ttaattcatg	ttcccacata	tggttctgta	ttttcacttc	ccccttttaa	ctgacatact	5340
gtcttatgtg	atctctactg	taagccttct	catcattttg	gaaacagacc	aaatataata	5400
tatatgataa	ggaatcaaaa	gtaaatacac	tagtgttgaa	tattgcataa	caaaaagggt	5460
tttaaatagg	gaatggtatc	aatatgaagt	gttagggaga	cccagccatg	aaaaggatag	5520
cagggtcaga	gaaggaggat	gtattgcagc	tggtttaatg	gagaattgta	tgaaggaggt	5580
gcagtttgaa	ttgggtcatg	gaggacagat	ggattgcaaa	tagctggggc	aaaagcacag	5640
gaaggcattc	taaacgagcc	aggcatggag	acaagaatgt	ctcccacaag	ggagttgtag	5700
tagctcaatc	agactgggat	ttgagatttc	atgtggcaga	gtggtaggtg	ataaagggtga	5760
aaagactgat	catagtaaaa	tgcggagtct	gtaaatccag	cactcatgat	aagtttggac	5820
atcatgtcaa	cagtggacag	ccataaatga	ctgcaagcat	cgggtgtggt	taatgaagg	5880
gacgtttttg	taaaatgact	ctgggtgaagg	tacagaagg	aatgaaaagt	agccagtcta	5940
gttgagcaga	aaagagttca	gatgtaattg	catcatggtc	cagatgtgaa	atgaagacaa	6000
tgcggaagtgg	cattgtggat	cgaaacatac	atgcacaaaa	tgacagaatt	ttagaatttg	6060
aagggatcat	catggttacc	aggctggcct	ccaattcctc	ttttgtaata	ttaatatgaa	6120
ttaaaggcta	acaagtttaa	aatggttatcc	atctttttac	atagttaactg	cccaaagtga	6180
atatttttgaa	atgtatcatt	aaagaagaat	agataagatt	atgtgattca	ccatggacta	6240
ttgtcatgag	aggaaaaatg	tgttttagatg	attctgttag	cactgagaca	aatcaggata	6300
tctgaaagga	ggtctttggt	gaaaaacaga	aatatgcatt	cataacttgc	ttttctaaaa	6360
ttggaatgta	atgattctta	aatatgcaca	gacacaaatt	tttctttaac	agtcaagaaa	6420
atgcacgcag	gtgataatca	gatcagtttt	ggttatagta	caaaggttta	atgcctccgt	6480
gatccctttc	aacttgaagg	cattctagag	caattgggtg	ttaatatcag	tataacagtc	6540
atttataaaa	tattatttta	tttgatatac	atctaatacg	agcataagat	ttatttttat	6600
tattattatt	atacttttaag	ttttagggtta	catgtgcaca	atgtgcagg	tagttacata	6660
tgtatacatg	tgccatgctg	gtgcgctgca	cccactaact	cgttgtctag	cattagggtt	6720
aaaagatcag	attgtctcgg	caccatgtta	atatcttttt	ctgttggcat	tagtattagt	6780
tttgcttggtg	tatttgttta	ggagatagct	tcacaagttg	gtgattgata	ttctaccatg	6840
tatgaagtca	tgcgtggaat	tcagaatccc	cagcttgtaa	aattgcatta	tgatcatctt	6900
tagtgggaaa	ttgttctcag	aatactgagc	aaaggatgat	acaaaaatgg	cagctattat	6960
tcattcttaa	gcatatgaaa	tgttttcagg	ttcaacccaa	aattacatac	attttaaatg	7020
cttactaaaa	gagtcctttc	cctcctccat</				

acttttaag	ggttcaaagt	aggaacagct	gcaatagtga	gctgcatctg	gaaagtcag	7260
taatttgaaa	aaccacctgt	ttatgtatcc	tgcccactca	agtccataaa	ataacagaca	7320
ctttcatatt	ccaaatgaaa	ctgcttttta	gtttgcccta	cttttaaaca	taactctttg	7380
tgatggaatg	accagaaaca	gctggtctct	aagaggacag	ggctatgtgc	gctcacctgc	7440
ggggttgga	cttccataat	ccccctggct	gtggggaaa	ttgagggtg	ctgtctttat	7500
acaaagatgg	tttattccaa	gatacacaca	ctcttcttcc	acaccctgga	gaccttgc	7560
atttagtatt	ttctttacca	taatctgagg	ccctagagaa	aaagatttgc	aaactatact	7620
tgttttaaaa	caacttttcta	aaaaagacac	cttcagcccc	tagaaaatt	gcctaacaca	7680
tagatgctca	gaggcaacct	gttgtatgtc	aagaggattg	tgccaagatt	agaaaacaaa	7740
tatttgcaac	ttttgtaact	gtcttctcta	aaacttgaat	gtggtgattc	taaagtaaag	7800
accgacacaa	aattcttttt	cttttagcagt	caggaaaagg	catgcatgaa	gtaatcagat	7860
cagggtgtgg	ttcagcataa	tggcctaata	ctttcatgat	ctctttcaac	tggaagcgt	7920
tctagtccca	ctggacacca	aggaggaaga	agggacggaa	aatattaggc	ccatagggtt	7980
atcttcctca	gtagtccacg	agatttgagc	ttatatgtag	ggagcaaaat	tgtttgtcta	8040
aaagcagtta	ataaatgccc	caaaaagggt	gggcgcagtg	actactcct	gtaatcccag	8100
cactttggga	gctcaagatt	gggtgatcat	gaggttagga	gagcaagatc	atcctggcca	8160
acacggtgaa	acccatcttc	tatgaaaaat	acaaaaatta	gctgggtgtg	gtagcgcgtg	8220
tttaattccca	gctactgggg	aagctgaggc	aggaaaattg	ctgaaccaca	ggaggccaa	8280
attgcagtga	gccaagattg	cgccactgca	ctccagcctg	gtgacacagc	gagactccgt	8340
ctcaaaaaat	aaaataaata	aaataaaaata	aaataaaaata	aaataaaaata	aaataaaaata	8400
aaataaaaata	aaataaaaat	aaaatgaacg	ccccaaaaat	attttgggca	aactattttg	8460
tgtttctttt	ctttattttat	ttatttcttt	tgagacaaaa	tcttgctctg	ttgcccggc	8520
tgaggtgcaa	tggcacaatc	ttgggtcact	gtatcctcaa	cctcctgggc	tcaagcaact	8580
cctgagtaac	tgggaccaca	gggatgtgcc	acaattccc	gctaattgtt	ttagccagga	8640
tataaatgct	gctacatag	agtttgtagc	tatctccttg	actttcttta	tgcagattcc	8700
ttcacaact	tttgatgat	tcctttacca	aattctactg	tctgttaaaa	tcttctatct	8760
ttatatcttt	agtcacaaca	acacgtcatt	tataaacctt	aaaattgttt	ctgggcaaat	8820
aaacaaggca	aaataggaat	atataatttt	aggcaattta	cttctgtttt	ggtctcataa	8880
aaaattgtaa	ttaaattgta	gaaaatatatt	caattcctct	ttaatatcct	ctcctcacat	8940
actggctctc	aacttcta	cctcctattg	aaacattgat	tgaggagcca	aggcaggcgg	9000
atcaactgag	gtcaggagtt	tgagaccagc	ctggccaaca	tggtgaaacc	ctgtctctac	9060
taaaaaataca	aaagattagc	tgggcatggt	ggcatgcacc	tgtagtccca	gctacttttg	9120
tggtgaggc	acgagaatcg	ctttaaaccc	ggaggcagaa	gttacagtgt	gccaagatca	9180
agccactgaa	ctccagcctg	ggcgacagag	tgagactcca	tcacaaaaaa	ataaaaaata	9240
aaattgaaat	ttgcagcctt	tttaaaaccc	catagcctct	ttataaaacc	aaaagcacta	9300
tcaaatttgg	cgagggtgtc	aaagaatcag	aggaaatgtt	acaaatacag	atgcctgggc	9360
ccacctcaga	tatatatata	tatatatata	tatatatata	tatttttttt	tttttttttt	9420
ttttgagacg	atgtcttgct	ctgtcaccca	ggctggagtg	cagtggcatg	atctcagctc	9480
actgcaagct	ccgtctcccg	ggttcacgcc	attctcctgc	ctcagcctcc	caagtagctg	9540
ggactacagg	cgcccgccac	cacggctggc	taattttttc	tatttttttag	tagagacagg	9600
gtgtcacctg	gttagccagg	atggtctcaa	tctcctgac	ttgtgatccg	ctcgctcgg	9660
cctctcaaag	tgctgggatt	acaggcgtag	ggcactgcac	ccggcccaga	tatatataat	9720
tagaatatct	agaggtggag	cctgagtatc	tgtatttttc	agagtttcaa	atgactgttc	9780
ttcaaagat	tacactgtga	agtcagattt	agaaatgact	gtacccaagg	ttggctaaaa	9840
gatacacacc	ctggttgatt	ctacctgaag	agagcaaaata	agatacacag	caaagttgta	9900
gatgttttcc	ctgccagtag	aatacttgcg	ggtaggcca	tttaaaaccc	tgccagagag	9960
ttttgaaaca	ctgtggaggg	ctcccaaata	aacttgctca	atggttctcc	atcccttcag	10020
gctacttggg	cttaaagcca	actgcaagct	tagagcctca	gagtgcctca	ggaatgggg	10080
gaccatatat	tctaggttgt	ctcatacaga	ctagccagca	ctactcagcc	gcaagtaata	10140
gcatccaggc	atgctcagaa	gtgtcccat	tgagggaaaa	aaacaatat	gtcacaaatg	10200
aattggcaat	ggcctgtctc	tgattcttat	acctggaata	tactggaagt	ccctactcat	10260
gctattttct	agcgaataag	gcaaaatttc	tacattccag	gcattgcagg	ccttccctg	10320
attcctttct	ctaattgtcac	tctgtctgtg	tcttttatca	cagccattaa	actgcacctt	10380
aacttaaaga	ggatccctta	tgttccaatc	tactcatccc	tcagatcttt	ctttctctga	10440
aacacagggt	taatgagact	gacatccttc	catcacatat	tttctcagct	actcagtaaa	10500
agatgtaaat	gtttaaaata	gtttaaacta	tttttcagtt	agtccaggaa	acataaaatg	10560
gcatgcttgc	acataaacca	ttgtttagg	tggggggaagt	gtttttaatt	ttgccttaaa	10620
ggaaatctgc	atgatccaca	ggctatgcaa	ctaccaaggg	aattagttgg	tagaacagaa	10680

ttagttgggc	tggccattaa	gaaccagacg	cttttatttt	caaagagact	taagttttga	10920
tggtgtacat	atgtgcctaa	tattctatct	catagcaatt	taaaggtgac	gttttaaaaa	10980
gctgcattca	gtgtataaac	ttctcctgat	cccagcaagg	atgttgtgat	gattttattt	11040
aaaaaggtaa	gttgtgtcta	gatatggcag	tgggtcatct	catgcatggt	gcagatgtca	11100
aacacaatta	cattttctta	tttgcaatga	ctaaaaaag	aagctgagcc	caagcagtga	11160
gaaagtagga	gattgggagg	acaagaagca	aaggaaaaaa	gtaacatgag	caccgttctc	11220
cctgtcctgc	cacttgctcc	attatggact	gggctgcgat	atctcatatc	ccagctccac	11280
aactcccaac	aaccatttat	gtgcatgggt	cttccatgtg	tgatgaccca	atcagggtca	11340
gggtgtggact	gagtagttaa	attataaccc	ttgtctctga	agagtttagg	gcttagtggg	11400
gaaacagaca	tgtaaacaaa	cctgagtggg	gtcatgtaat	caaaggacag	gccacagtca	11460
accacaaaga	agagagttct	cagcagtcct	caaagccgaa	catatgttta	ccaggaacag	11520
gggtcccagca	gagggagcaa	caggagcaac	cagagccttg	aggggtcgtg	gcctgttctg	11580
ggcaccagca	gtggatcaat	gtggccagag	ccagggatac	tagcagaagc	cagagcagca	11640
gggccttctc	tgtccagcaa	aggcatttgt	ctctttgtag	gccacagcga	cccacagagg	11700
gcttttttagg	ccagaaaaaa	gccattaagg	ccgggcgcg	tggtcacgc	ctgtaatccc	11760
agcacttttg	gagggccgag	cgggtggatc	acgaggtcag	gagatcgaga	ccatcctggc	11820
taacaagggtg	aaaccccgct	tctactaaaa	atacaaaaaa	ttagccgggc	gcggtggcgg	11880
gcgcctgtag	tcccagctac	tcgggaggct	gaggcaggag	aatggcgtga	accaggaag	11940
cggagcttgc	agtgaagcga	gattgcgcca	ttgcagtcg	cagtcggg	tgggcaacag	12000
agcgagactc	cgtctcaaaa	aaaaaaaaaa	aaaaaaaaag	ccattaaaaa	gggagtcatt	12060
tctcttgggtg	gtcattattt	catggcaggg	gaactacata	ttcttaaaga	cacaaccatt	12120
tcctcttaat	cctcatttag	tgtgctggca	attaaaaaac	caaagttttt	tactttcaag	12180
aagattttaa	taacttctga	gggtgtacat	atgtgcttaa	tattctgtct	cacagtaatt	12240
taaaagttaa	gttttgaaaa	gctgcattct	gcgcttgctc	gaacctgtc	tgatgagata	12300
tcccctttta	agggctctcg	gtgcaatggg	gcaaatcaag	gggggtttgt	caagtgggag	12360
tgagacagga	gatgggggtg	ttcttccagc	actccctata	ggctgactga	gtgacaaaga	12420
tcattttact	gacacctcca	atggccctat	gagatgggta	ctattattat	tatcaccatc	12480
atattccttt	tgcagataag	gaaactcagg	cttagcagat	tgccagaaca	acacaggcag	12540
gaagtggtag	agtcagggtt	tgaaccagc	tagtgaaact	ccaaagccc	gattcttaac	12600
cactgtcctc	cagtgccctc	ctgtaataag	tcattgatcc	agaagccatt	gggtgtggcca	12660
caatatggaa	agagatgaca	gtgtcctcac	actgggtgag	cagcttatgg	tgattccaga	12720
catgatctct	gttgggagtg	acaggtctga	gcttctagga	tcagacccta	gatcttggca	12780
agtggtttga	ggaaagagaa	ggaccaatgt	aaaaccccag	gcttcaagga	atgtggatgc	12840
tgggcagggga	ggattaaagg	ccaaagacca	gaaatgggg	acacagggca	gggtgtggcca	12900
gagtagaact	agagtagaac	ttccagtgac	tagaaataga	accagacacg	ttgcagtggt	12960
ggataaggta	gaatcgctta	agtctttaa	gtgcccctga	tcacccaagt	tggccagaga	13020
ccctgggggtg	gggctgattc	tgtctggata	tacggggagg	ggtaagcatg	aggaaaggaa	13080
gcaggctcctg	acaggtactt	tgcactaaac	agctccttat	aaggttctca	atttgcctgc	13140
tcaatttcta	cagacatttg	tgggaccaca	ccagtacatt	gtaaaagcag	gaaacaattg	13200
agaaaaacct	gagttttatg	ttggtaggag	aatgcctat	ggaatatggc	aatcgtttc	13260
tctgagactt	cctccctagt	aattacatat	ttgttctcaa	aaacaaatgc	cagaagggaag	13320
aagcagattt	aatagtgcatt	tttacaaggc	accattaatc	tctaagaaga	acaattaaaa	13380
tgtctcagca	atcatgggtc	actgtatatc	ttttctatct	tcttagaagt	aatatatggc	13440
tggaaatggg	cataccaaaa	tatgtcaagg	aagtggattt	gcgttcatta	gatttcacca	13500
ctaattattt	tagttagctt	cacagatctc	tcttccctgc	ttgttcttga	gagcgagggt	13560
ttttagtagg	aagagaaatt	gtctaaaacg	attaataacc	acaaattcac	caaactattt	13620
tgggtaagtc	cctctatttc	tctaggtcta	aagctaggaa	taagagtcatt	tctcatataa	13680
tgtactgtcc	cagaaagggc	attatatttag	tctgttttca	cgctgctgat	aaagacatat	13740
ccgggattgg	gtgatgtatt	taaaaaaaga	ggtttaatgg	actcacagtt	ccacatgcct	13800
ggggagggtt	cacaatcatg	gaggaagggt	aaaggcacat	cttacatggt	ggcagacaag	13860
acagaattga	gagccaatca	aaaggggaaa	ccccttataa	aagcatcaga	tttctgtggga	13920
cttatcacta	ccacaagaac	agtatggggg	aacccgcacc	atgattcaat	tatctccac	13980
aaaatgggaa	aattatggga	actacaattc	aagatgagat	ttgggtgggg	acacagccaa	14040
accatatcag	gcattcaacc	aatatttggg	aagcaccagc	cctgcaccag	gcacggagca	14100
cgtcatgagt	cctgccgtac	cacagcctgc	ctgacagacc	tcagtcattc	tctggagctt	14160
gcctctgaca	tctggacctc	ctcagaatca	gcattctctc	tccttgcccc	cgccatcctt	14220
tgtttttata	tctgtgtgtg	cattcatcaa	agccttccaa	ctatcctgcg	tcactgtcct	14280
tcagtgtcct	ctctcctctc	ccttccctct	cacccactt	tgtgcctgta	tccttcaagc	14340
agagcaatgg	cacccctcact	tctgtggctg	cccagtcccc	catgcagagt	cagacatcag	14400
aaaatagatg	ctgaattcag	ttgacactct	gaaattcttt	ttaaagtaag	ttaatgtgtg	14460
ctttgaatga	aaagacactg	ggattacatt	attgagtgtc	tttcttccct	tgccactttt	14520

gtccctatttg	gccatatattg	aaaatctttgt	tggaaaaaaa	aattcaagaa	cttaataaaat	14580
aaattcaaaa	acatttagtc	tatttactta	gggtgaagaga	aaactcattc	taatatgtgt	14640
gtatatthta	aatatttggt	atthagactt	tttttttaag	tctccagggt	gaggaggaca	14700
caaataatc	ctcctaaacc	ttccagtaag	caagctgtgg	catccagatg	atctcctggg	14760
tcatggggga	taaggctaata	ctcctagggtg	tctggcagac	aggacaggca	aattcccaga	14820
atgccaaaat	ataccatctg	ctgctgtttg	gcattgccct	taagtccaga	gtgtggaggc	14880
tgggggtggg	tctctggcta	caggagaagt	cccctggcaa	gggaggggtg	aaaggagtgc	14940
ctgttgaaac	ccccatctat	ccccgacta	tggcaagatt	gagaggaatg	actagatcag	15000
ggaattggccc	gaaagaaaaa	tccaaaacct	cccaaccctg	gacaaggcca	cagctttgag	15060
aaaccgaagc	ctctgcttcc	ttctctttgg	ctttactgct	tctagatgca	aatacacaga	15120
gctctgagat	tttgtgtgct	gggaggtgat	aactgttaac	cctctattcc	aatagcacag	15180
aaattttctct	ttgcctcaga	agtggtttct	catagatctc	agatctcttt	tcaggaaaaa	15240
gaaaaacaac	aacaataaca	acacattaat	gactctgaaa	gagtcagaca	ccattaattc	15300
cattattgggt	gtctgtgcca	agtgaaatga	acgtcagctc	ttttcccaga	tatgtttcct	15360
tcttttgctt	cctataataa	gagatgattt	tactgtaata	atataagact	catcaatttg	15420
actccaaata	gcttttctat	caacaggcta	agtgtaaaaat	accaggatca	ttattcagtt	15480
gagaatatgat	agaactagga	agtagccatc	aaaaaagaat	gatgaggtgc	attgtggatt	15540
tggggtgttaa	cttggtatct	aacatacagc	cagaatcaca	gtcatagcac	acttaataat	15600
ttatcgtaaa	cttgctgtaa	caagttaaga	ggactctcaa	cttaaaaatg	acaccaattg	15660
caatgatctt	gttaacattt	gtgatgaaaa	taatagcaaa	gtgacttaga	caaattacaa	15720
tagcccataa	aaataagata	aagtttaaca	caaagtaaga	tgatgttaaa	agacttgaaa	15780
taaaacagat	atgttaagta	ggcaacacat	aggtaagcat	ataaaaacaa	gaagatacca	15840
ggatagagct	gtcatttttg	tgggagcctg	tgatgtggaa	aaccaagatg	cctggtgagt	15900
ataatggata	tggaaacccc	ccttgtaata	attccacagt	tccaaggggc	caaggctctcc	15960
agggttgagtc	actattgtaa	acacacccat	agatgcaatcc	acatgccata	cctccttgag	16020
taagtgtggga	ctcaactag	gtctgtcaat	tgttccagaa	aattaagcat	ctaaataatt	16080
taatgataat	ttaaaagaag	cacaatgaaa	tatttcaagg	aatgtcacat	acaagattct	16140
gtacctcttc	tgctttgggt	agactcattc	agaatagggt	cctgctttga	tcttaagagg	16200
gaggtagaga	ttctggagaa	gccctaggga	agagcaaaag	gaaaggaata	aggagccaag	16260
aggaaaccca	gggtaaggct	gaggagggac	tgtttcgtgt	aggtgattta	ttggaagggt	16320
tgggaaggaaa	catggaatga	caattacctt	tggttattgt	cagggttagta	tgagacttac	16380
aagaaaagca	ctgctcagac	gcaattacca	ttcaagataa	gaaataatag	gaaaggctag	16440
cacacttagc	tttttatthta	aaaaagtggt	aggtaggctg	agcacgggtg	ctcactcctg	16500
taatcccagc	actttggggg	gccaaggtgg	atagatgact	tgagccgaca	agctttgagac	16560
cagcctggac	aacatgggtga	aacctcatgt	ctacaaaaaa	atacaaaaat	tagccaggca	16620
tgatggcatg	cacctgtagt	ctcagctact	tggggggcca	agagggtggga	agattgcttg	16680
agcccaggaa	gtcgaggctg	cagtgaacca	tgatttgtgcc	actgcatgac	agcctgggca	16740
accgagttag	agcctgcctc	aaaaaaaaaa	aaaaaaaaaag	tgtaggtgta	catgagagaa	16800
gatctttccaa	gtaataagag	tggctaatacc	caggaatgtg	tcaccagagg	ttatttttgta	16860
atagtcgtgt	gttaaatcc	ttatttgtct	atataacttc	tcaaatcctt	ctgcctctac	16920
agttatagtt	taactgggcg	ataacagcct	tcacacacag	cctcataatt	aaacatagac	16980
atacatatga	acactttccc	ctatgccagc	aggatacttg	gtttgtttag	gggcaagag	17040
gaattgatgt	ggcgttgttt	caatcagtgg	ttgaaaatgc	aagtggtaaa	cattgaaaaa	17100
tagaacactg	caaaaggcat	gcattgtata	taccaaaaaa	tcagcatgaa	gcattatctg	17160
tatggcaagc	ctgcccatacc	actccctcct	acacgttgca	tattcacaca	gttttgacgc	17220
ttgtataaac	ccctattgtg	atagaaactc	atgaaagagt	gtggctctctg	cgaagctgg	17280
ctgttctgtg	aatttagacc	agtggttcct	caccctggct	gcaaatcatc	tggggaacat	17340
ttaaaaacac	tgttttaaac	accccaaccc	tagaaattct	gatttaattg	gtctgtgggtg	17400
gggccagaa	ctctgtattc	tttttttaag	gctctcaggt	gctgctaattg	tatagctaaa	17460
attgggtctg	gtttagactc	tcagaatttc	ttaataatta	aacactttat	catgacaaga	17520
ctttcaggac	cttaaaggcc	acagtggggt	agttatcatt	tcactaggtc	ctcatctggg	17580
gaggtccttg	gcattttttac	tggaaataat	ttgtcactca	aatttctatt	acaaaaaatt	17640
ctttcttgca	cactgcttta	gcaactacat	gagatatact	ttgtacatag	cacaaatctc	17700
atatcactta	tgtaatccag	ctctgtgggt	ccttcctttc	ctttgcctgt	ttatttttaa	17760
ttcttcccaa	gaggaagctt	agccagttag	aacaccagag	tatcatcccc	ctcccccttt	17820
tcccacctga	gttcatggct	tagacatact	aggaatgaag	ctgacaacat	gcactagttt	17880
ttttcgaaat	tatgcagcaa	aattcccaaa	gtgcgagtg	ccacagagat	cttcacagg	17940
cccagggaca	ggcagacatc	attctttctc	cagttcctgg</			

aatctctaag	ttgcctttat	ttataaaaatt	ccgagattct	agttgaccag	tattcataca	18240
agagttgaag	cctgtaagag	tgcagaaaagc	ccacacaaaag	agacagtggga	agacctctca	18300
tcagtagtat	ttttattacc	ctcttcctag	gttttaccag	tcaacatcct	cactgttaat	18360
atacagaccg	tggtatttaa	ttaaatcatc	tttgaaatac	tgagctatca	acagatggca	18420
tgctgaatgc	aaaaggacca	caaataaata	tttggtagctg	aagaagatca	agagttggag	18480
ttcattttccc	attctgatct	gggctcagaa	ctctgtggctc	ttccctctaa	tcactccttgc	18540
caccaaattg	gctgtatctg	ttctaagatg	gatcagaaaa	tcagttccaa	agttggctac	18600
aaactttcag	gtttggggtt	tgttttgttt	ttttgttttg	ttttgttttg	tttttgcaac	18660
cagccaattc	atcttagttc	acatgacaga	gaagtgcata	attacttgca	acttttagtta	18720
gagcagtggc	cttaagaagg	tctagctaaa	taaaaagtgc	tcagactttc	tgagtgtctga	18780
cagttgtcaa	attcacctag	ttcacatggc	cccattttcta	tcgtttgttt	tgttttgttt	18840
ttgtttttta	acagcccata	tgtgagcaat	aggatcagat	gactaagagc	tacagggcag	18900
aaacactggt	acttagagtc	aaattttccc	attacctagc	tgtaaagagt	ttgtttctct	18960
ctgactcata	taaagtttac	catttagggc	cctgcatgat	tttaattcca	tcacttaaca	19020
ccccagccat	atgattctga	aggtaaacad	gaaggcgttt	gaattccaga	ccacctaaac	19080
attcttaagg	aaatcatcat	ctccacgggc	agagctatgc	caaaatctgt	agggtttaac	19140
tcaaatttca	tgataagcaa	aaattgaatt	aatttgcctt	ccattttgtt	cacctttttg	19200
ccaaaattat	gcctggatta	gaataaataa	attcaatcaa	tgaatgcaat	cactaattct	19260
tacgccagat	aataacacat	tcagaattct	cctttccctg	ggagatttta	tcagggttagt	19320
gttcttgtaa	acaggagaaa	gagaaaaata	taacttagta	aatagcagta	ttcactaatt	19380
cattcattta	ttcaacaaat	attaatttac	tacctactac	attccagggg	gcttagagtc	19440
tagtatcaga	aataataacc	acacacacac	atacacacac	actacattaa	ataaggatgt	19500
gataggctag	atgaaataaa	taaataaata	aaaggtccag	gtgagaaaaag	aaggtggggg	19560
ctagaaagaa	gtcattgaag	aaaaaacatt	taggttaaaa	cattatgaat	aacttagagt	19620
gagccaagtg	cagagtgtct	aaggagtgtc	ccaggcaaaa	tcaacagcaa	atggggagtc	19680
cttgatgtag	aaaagggttt	gaggaattgt	cgtgggagaa	atactcaaga	ttccagctcg	19740
aattctagag	gttagtgatt	tagagaggca	agtacgaaaa	tgacttcctc	tcttacctta	19800
aaagtaagtg	caccatagaa	ggaaatcacc	cttccttggt	aataattcct	gagtgaacct	19860
gagaagccag	aggccatctc	tattttatag	gcactgtccc	cttttcagtt	acccatggct	19920
agctcattga	ccttgctctg	gtcgtttcct	catttcactt	actccatcct	caaaacgtag	19980
acgcttcata	aatattgtat	aatgaatga	actcacaag	tcacagtaca	gcaaggcaaa	20040
agtgcctgca	ataaacaagc	attctaggct	agaaatattt	ctcaacttca	aattgtgtct	20100
tattacattg	tattccgatt	ttctagagtg	gtagttctca	gtcaagggaa	agtttttctt	20160
cccttccagg	ggatatttgg	cattgtctgg	agatagtttt	agttgtcacg	atttggggga	20220
tgctttctgg	tcaacttgga	tagagaagcg	gggatgctta	taatcatcct	acagtgcaca	20280
ggacagtacc	cccaccacac	ctccagtaat	gaagaatcat	tagacctaaa	atgttaatgg	20340
tgtccaggta	gaaaaaccct	gttgtagagg	ttggggactg	cgtcttgaca	gccacattat	20400
acagtgtatc	aaacaattct	gtataatggg	ctgtaattat	ccttgccctag	attttgcaag	20460
aaccctagtg	tgtatctttt	tcctcacttg	ccaagcaatg	ttcaaacctg	cagagattta	20520
tttcattcat	tttctgtgtg	tttagtaaac	agactagaag	cactggagga	aaaaatattc	20580
cagcaatgag	gtaagacgaa	agctattagt	aaccctagtt	taacttagct	gaatagtagg	20640
aaacaacctc	taccgtgagg	aagtgtattg	tagaaaactga	aaagacgcta	atgatgttta	20700
aaaagctgta	gttcaaacaa	atgtgcatgc	agaccaattg	gtagactgaa	aatgatgaag	20760
acattttcgt	ttcttgtgtc	tttgatagaa	agaaaagagc	ttttattttc	tttagtggg	20820
caatcattca	gatttgtccc	atgacatgcc	cagaagggtg	aagaataaca	aactcccaag	20880
tgtaaacaca	gaatttagcg	aagaatccag	gcctctggat	gaatccctgt	aattgcatgt	20940
ttggataaaa	taagattttc	atacattaaa	caaggtagga	tttttctatc	tgggacggaa	21000
ctttcaacac	ttggaggggt	tgtagtattt	tctcctcaaa	gatggcaaac	atgagtggcc	21060
cgagttatcc	ctcctctctg	ttcaagttcg	ctaactaatc	accagtatc	catgctatcg	21120
ctggcccttc	tgtggcctat	ttttatactg	ttcactgttc	agtgtcactt	gtttggtaac	21180
actcaacatc	aacatgtgct	accaaattga	caccagagga	caaaaaagaa	tcaagatatg	21240
tacagcctgc	tttgtagtga	gccagctgcc	actagatgtt	ttttgtgata	atgaacacgt	21300
gagggcatgt	ggagcgcaga	gatggctccg	ggttccctca	gacggctcac	agccagctgg	21360
tctgcagtgc	ggtttttagat	tccgatgtgg	gaaccccata	aaaaagaata	tgcaggccag	21420
gcgtgggtgg	tcatgcctgt	aatcccagca	atttgggagc	ctgaggcggg	tggatcacct	21480
gaggtcagga	gttcgagacc	agcctcgcca	acatggtgaa	atcctgcctc	tactaaaaat	21540
aaaaaaaaaa	aaaattagtc	aggtgtgggtg	gcggatgcct	gtaatcccag	ctacttggga	21600
ggctgaggca	ggagaatcgc	ttgaacctgg	gaggcagagg	ttgcagttag	caaagatcgc	21660
accattgcac	ttcagactgg	gcaacaagaa	tgagactctg	tcacaaaaaa	aaaaaaaaaa	21720
agtctgcagg	ctgcataaag	aggtatgaaa	atgttccaga	aatcccaaat	cctatccctg	21780
aggttcattt	tggtgagggg	atgtgtgtgc	attttctag	gtttccctaa	aaaagtatca	21840

aagacgtggat	ggcctaagc	tacagaaatt	tcttggggac	aaatttcatg	attctggaag	21900
ctagaggtcc	aaaatcaagg	tgtcagcaag	gctatgcttt	ttctgaagcc	tatagggaag	21960
gccttccttg	tctctcctag	tttctgggtg	tttgctggca	atgtttggca	ttctgtggat	22020
tgacgtaca	taactccact	ctgcctccat	cattaatggc	cttctgcctg	agtgttttca	22080
tatgaccatc	ttcatataag	gacaccagtc	atatttgatg	agggttccac	cctactccag	22140
tatgacctca	tcttctacta	ctacatctgc	aatgacccta	tatccaaata	aagtacacatt	22200
ctgagtgtct	ggggattaga	acttcaacag	agcttgttga	agggggcaca	attcaatgca	22260
taacaggatg	gaaactagaa	acgggtatgt	ttttactcagt	gtagaaagat	ttagcttaatt	22320
ttttcaaagt	gtaataaaaa	cccaggaaa	actcatactc	cctcctaaga	agagcaaaag	22380
atggagaaac	ccgatggtta	ccttcaaaca	aaaggaaagg	aggaataaga	tgaaaaggaa	22440
ttaatccaaa	gcaaagagag	tggtttatat	ggaatgttgg	tgcaactttc	tctgacacat	22500
ctgtgcactc	atcagctggg	gcatcatctc	cctgggggtac	atttgggtcac	tgtgtgcctc	22560
atggtaataa	actccagaag	cctcattgac	ttgctagaga	tgagctcatc	cttcttgctt	22620
gcttaatggc	aaaatacaaa	ataagcagtc	actgacatgg	aacgatttca	ggaatgccaa	22680
aaggttctcc	ttttccaaaa	tatctcttcc	atcttcccaa	tactgttact	gacatcata	22740
acacctctcc	acttcgggtt	gagacacctg	ggccagagct	cctgatgtgg	caggcagtgc	22800
cctaaacgtt	ttgcataaat	taactgatgc	ccagagcaac	aaccttaaga	tataggttact	22860
atcataccgc	atcttacaga	taagaaactt	aggcacaaaag	agggtttagta	gttttagatga	22920
gataaccctg	atgagcagag	attcgaaccc	agcctccatg	ctattaacca	ggacatcata	22980
ttgcctttca	tacatgtctt	tcaaaggcaa	cacagtaatc	gattatcaca	ctcactcaca	23040
tctgattgtc	acatttttca	gatctgtctt	cctagcagag	aatgaagcct	aagggtatcct	23100
tgtttctcaa	agtgtcctcc	ccagaccagc	tgcatcaaaa	tgagggggatg	agggtgcaaat	23160
gcctggacc	tgcccttgga	gcactgattc	ataatctcat	gtcccaagaa	tctgcathtt	23220
aacaagcatc	cccagaaatt	tcttaagtat	actaatgtat	gggaaccact	gacactattt	23280
aaatggaata	aggggaacgt	acaatggttac	agtaaaccag	gaaaagccag	aaagacatga	23340
caacacagt	aggactctgg	tagccaatgg	tcagtcaa	gcccaggggc	cctggccaga	23400
agagagttag	gttgctgagg	agtaagagtg	atgctgaatg	tgagggcttg	agagcagaag	23460
gaagccagcc	agctatatcc	tcttgcttgg	atcacacacc	ctttccttgg	tggaatgggt	23520
tatttgacga	gttagagaag	gcatgtttta	cagtttggat	ggcaggtatg	gatgtagaca	23580
ataaagagca	accagagtcc	atgggttcag	aaatcccat	gtgtttctgt	ttgaatgaga	23640
cgcttgcata	aacagcacaa	ggagtttggg	gtgggggttaa	agagaatgggt	gtggtatagg	23700
gagagctgaa	tgaggaactg	agagagcaaa	atcctgtgtt	tggttcaatc	actgattaca	23760
acctccctga	ggctcgggtc	cctaattctgt	aaaatggggg	gaaataatac	ctgccttga	23820
ggtcctcaca	cacagggcat	gctatgtaac	cactgaggca	tatagcactg	tgtaacatga	23880
gttattgcta	ttccaaggcc	cgtaaaaggc	tcttgctttg	gaatatatct	gccacaccaa	23940
tgctgcagt	ccattaatga	cacataaagg	acactggaga	taacgatgtc	ccttgttcta	24000
tgcatccctc	ccacctatgc	cagaaaagaa	aacacagtca	cctgaagtca	ttctaaagag	24060
tatgctgccc	tcttttctcg	cacagacaca	tatacacaga	cacgcacata	cacagaccat	24120
gcacatacac	acacatggga	aaacatgagg	aaaagtggag	acaagaggca	ccaaaggaca	24180
aagtcacttt	tgtcgcctgt	cccttcccca	gcaggggctgg	gcctgggctg	cttctcctgc	24240
ctctccctg	aagccccctc	ctcatcatat	tccagtgcgt	gtccaccact	ttggggccag	24300
gtctacacaa	ctgcagtgat	tcaggtcacg	ggagaaaacc	caaacaagca	caaaacatgc	24360
ttcaacctat	attttctaaa	ttgtttttct	ttaaagggtga	agacttctga	gcttgaatta	24420
tcccttgtc	agtgggcttt	ccatgctgtc	caagtgcct	aagtgataat	caacctccat	24480
ttcattttga	gaatggttgt	ggtatttttag	agctatggtg	aataagaaaa	tcatttataaa	24540
taaaatgatt	tttattttatt	tattgtttttt	atttattttta	tcttaaatga	attttaaatc	24600
atttataaata	aaataatggg	ataaaaagagg	atgctaaaaa	taataaatat	atatgtatca	24660
aagtgtgctt	gtaataaccag	gcaaagaatt	aataagagat	aatatttatgg	ttggtgaaat	24720
gttatgtatg	gctacatcct	ttcaatgagc	atttatagtt	cctttaaaaat	atgcctactg	24780
aagaaatatt	tacatgctaa	ttaacatgtg	catagtacca	ctagggtatta	tagaggatac	24840
cagatgtttg	tagtagacac	agaccttgcc	ctaagtccctg	gtcttgatgt	agtcactttt	24900
tagtcactac	aggtgactac	atttagtcac	tacaagtgc	cttccttcaa	tggggaaata	24960
aaggacttta	caaaagacgt	agaagacaat	tcttaataata	aaagtgattt	agatcttcac	25020
aagtttgtga	agagaagcag	atgagtga	tagaacacta	tcaatgtaaa	atattattct	25080
gaggcctctg	taatgactgg	gaagcaacaa	gagggagggtc	atttcagaga	gagaggctct	25140
aggttccaag	ctggatgctc	aggtcagtga	ctgcagggtcc	cctccacacc	catcacccca	25200
caccctaacc	ctcttcagtt	gctcacaaa	gtagataaat	accacacattt	ttgccctctt	25260

gaggtgtcag	tttggcccg	taaagattgc	ccctgagaaa	acacatgggc	aatttagagca	25560
aagttcctat	gttctggtaa	cattttaattg	tgctattttct	caacctcctc	tgcacccaca	25620
cactcacaca	caacatttat	tccactgact	tcaaaggaag	ctcaacgtgt	taaaaatatg	25680
tgtgggaaca	aagaagggag	tttgaaattg	gtctaaactc	tgtataactg	ggtttgacac	25740
gtacattagg	atttttacaag	tatgtattta	atcttttttt	aaaaaaaagcg	tttacatagg	25800
gttcagaata	atgacaataa	atcaacattt	ctattgtcca	tttgtgtgtt	ttcatagtaa	25860
ataatgctca	tttatcctta	accagtaata	catacttatg	ggcttaaatt	agcaaaagcc	25920
tctcaaaaag	tagctccact	cattttatcca	ccagtggtcca	gatgccatcc	agcacatgag	25980
gagctcccg	aaaggagcag	ggaacaaact	agggtgtgca	ggagtggagg	agaaagaatg	26040
gcatatgcaa	aaaggagctg	taattaaatc	caagggaaca	tggcacactc	tagtcttttg	26100
cacgagacaa	agggcaatcc	tggtaaaaat	acagatcccc	aggccccacc	ccaaagagtc	26160
tgatctgatt	ctgaaatggg	gccggagaat	ctgcatttta	acaagcacct	tcaccagggtg	26220
atcctttttg	tgagaacccc	tgagaaatga	gaaccctgtg	ctagtgtgta	atggagcatt	26280
atattccaga	gttgaagttt	ggtgatcagt	tttcagatg	gagctgggtcc	ttggtgcata	26340
cctgggtata	aatccaagcc	aattcaggta	tatgagctga	tatttcaacc	gaaacactat	26400
ctatagccta	aattttttct	aatattctgt	ttggtatgaa	ttctagaagg	ttgtaaatgc	26460
tatatttctt	tctcatctat	tcttggactt	tgtcccaag	cgaatccca	gggcatctga	26520
tagacattct	ttgcatacat	ttttctgtaa	actgaaaaac	tgaattgtct	aatagaaaag	26580
ggcaaggaag	tagaaaataa	gaaatcatca	tcagaagtgg	tttgttttgg	aatttatattg	26640
tccagctgca	taacaaatca	ccccaaaaat	tgagtcgctt	agaacaacaa	acattgatcc	26700
tccacagttt	ctgtgtgtta	ggaatcaaag	tgatttaatt	taatggttct	gctcagggtc	26760
tctcgggggg	tgcaatccag	gtctcagggt	gggatccttt	caaggctgag	ctgggggaaag	26820
atccatgtct	aagctcactc	acatggccga	tggcgggatt	cagttcctct	taggctgtca	26880
gactgagggc	ctcctgtgtc	cagtggtttt	agccagagcc	ctctctcagt	tcctttccac	26940
atgggcctct	ccacagggca	actcacaaca	tggcagctgg	tttccagtag	agcaagcgag	27000
tgagagaaca	agaaaggcaa	gcaaggtgaa	tgtcccagtc	ttttgttaacc	tcactctcaga	27060
agtgttaacc	catcactttt	gccatgtttt	attattttaga	agcaaatacac	taagtccagc	27120
ccacaattag	agggatggca	ttacacaagg	gaatgaacac	cagcagacag	ggtcattgaa	27180
agccatctta	gatgctgtct	atcgcactta	agtgtgattt	ttccagatga	aaagaatata	27240
ttaatttggt	tcagtcttag	tcgatgtgcc	atcccatttg	tgctttgcta	aaacttgtat	27300
caatgtaaag	caaacatttt	ctgatacaat	ttaggtagtg	tattgtggta	atagagacca	27360
gtagtgttga	aaagatatgt	tgaggtcaga	aattaagctc	atgtttctaa	aagaggagat	27420
atgtacaact	actatgcaag	ccaacaggaa	agagtgtttt	aagaatgctt	tctgctacag	27480
gtaactaaaa	acctaacaag	ctgtggcttt	aaaataaagg	tatatctaa	tcacataagc	27540
aaaagctctag	gggtgggcag	ctgctggcat	tgcttcagta	gcttgataat	ggcaaaagca	27600
gactctcttc	tatttccctg	gccttcta	atcgcatgtc	acctcacaat	cacaacatag	27660
gcaacacctc	atatttctaag	caagatgaaa	agggcaaaga	gtcatgccat	atgcctctgt	27720
ctctttttcat	aaggaagaca	aagcttccct	ggaagtcccc	tctagcagat	ttcacttaga	27780
tctcattggc	cagaactgag	tcacatgcct	gccttaaacc	aatcactcac	caagaagact	27840
aacattatca	tggcaagtct	aaaccaactg	tgactcatct	ctgaaatcaa	aggattatta	27900
ccattacccg	aatccattcg	gatcctgttg	gcagagaagt	gggactgtaa	attttgagca	27960
ggcaacaacac	aagctcttcg	taaaacttct	atgtgttgtt	ttttatgtgt	tctatatact	28020
cagtagaatc	acaattttcca	ataacagtct	aaaaagatat	tttccaatag	aaacagaatg	28080
tgtaaagatca	tactttatga	aatcccaaat	gtacttaagg	tttcttctct	gaaaattcct	28140
tattcaaaat	aaaatgtcca	gattttgaaa	cccagaaaag	attctatatt	ttaaaaatcc	28200
tgtgcacatg	taaactgttt	ttcaaatatt	gccttcagat	acattgaaca	gaatgaaatc	28260
ttctgagatt	tactacatca	gccaaagtatt	atcaaaacaa	acaggacaga	ttgcttttct	28320
tgacgtctgc	tgettatttt	gtgttaactc	atgtttctga	aattgtagta	tcataagcca	28380
atgctgcaca	aaggatatct	atgtcattta	taaaaatcta	gtaatgtaaa	ctgttaactc	28440
cttataaagc	atctgtttgac	acacaaaaat	atcactgaag	tgcattttatg	cctttcttct	28500
ttaggtctgc	ataactattc	cctccagaag	gccaagtgtg	tccataaatt	acagaaacaga	28560
aagtgtggtg	tgggaggaat	agctcaacct	catctagggc	atcccactct	aagaaactaa	28620
tggcacctac	acctcttggg	cattgagttt	ttaagcccat	ttttaattct	tgttctgtct	28680
atatttctaag	tgagcacata	aagtgtgtgt	ccaagcaaga	ccagcccttg	tagaaggggca	28740
agtgcagtca	gtcccttagg	aaacgggact	ggggagtgat	cgtttcaatg	agagataaat	28800
caaactgatg	ctaacaatga	acaatgagcc	cattagagat	tgtgagaaa	aggcatcatc	28860
atccactcaa	caataggcct	gtggggacctc	ttgatagcct	gaggatgttt	aatttcagggt	28920
gcagggtatcc	agaatgtagc	agctagactg				

tgtgctttga	ttgatgtgga	tctctgaact	cccttaaata	caaagaccaa	ttatttagcc	29220
gagctttgtt	ggattcagtg	cattctgaat	acatgtcaaa	atatacttgg	atttgtaaaa	29280
aatattcctt	cctgtttttt	tcacccataga	tagatgtaca	aaaatgtccg	tgttcacacc	29340
gtggaaagga	cattttctcat	aaactcacac	agagatacct	ttcaagtcaa	tgccttagaa	29400
agcaatgaga	gatttaaagg	agacctagag	atatgaatgg	agtaggcaga	gaaggatgt	29460
gaggagaatg	atgtaacttc	ctagggaaaa	agtatgaagc	acaaggctgg	acatagacct	29520
gggaatcagg	aaattagagt	tctaattgca	gcttttccat	tgattcactt	gggatcttga	29580
gaatatctgt	ctcattttaa	tcattctggg	ccacagtttc	catatctgtc	aattagagta	29640
agagtccctg	gctgggtgcc	caggattgtg	agaacatacc	attcagagcc	ataaaaaatgc	29700
aatcagttacc	aataatgtac	tagtaccagt	acctaggatg	caaaacatcc	tagatactag	29760
gtgtcctaac	ttaaagtggg	aacattaaca	agagtaattc	tttgaatcat	caaactggga	29820
atatttttagg	aagcatatct	atctgggtga	aaactaagca	aataagacaa	ttgtaaaggc	29880
ttgtgatctc	aggaatacaa	aggcaaaaat	gcgagactt	gaaatatgac	aagttctagt	29940
tttgtcactt	agcatctctg	tgaccttgga	taattttctta	acccccggca	gtattctcat	30000
ctgtaaaatg	ggaataatga	catgcacttc	agtggtttgt	ggtgaagatt	attacaaata	30060
gaaattagct	cttttgagcc	actgggtggg	tttaaatccc	cagcccttat	gtgctttgca	30120
gctgttagtt	cctcttatta	caattgtcta	tttaaaaacc	tagtcacagc	ccgggtgcagt	30180
agctcacgtc	tghtaatccca	acactttggg	aggccaaggc	aggagaactg	cttgagctca	30240
ggcgttcaac	atcagcctag	gcaacatagt	gagaccctct	catctctaca	aaaagcaaaa	30300
aattagccag	tgatgcatgg	ctgtagctcc	agctattctg	agggctgaag	ttggaggatt	30360
gcttgagccc	aggaggtcaa	ggctgcagtg	ggcagtgatc	atgccgctgc	actctagcct	30420
ggatgacaga	gcaagaacct	gtctccaaaa	aaagaaagga	aggaaggaag	gaaggaagga	30480
aggaggaaag	aaaagaaaga	aagaaagaaa	gaaagaaaga	aagaaagaga	gagagagaga	30540
gagagagaga	gaaagaaaga	aagaaagaaa	gaaagaaaga	aagaaagaaa	gaaagaaaga	30600
aagaaagaaa	gagaaagaaa	gaaagaaggg	agggagggag	ggagaggaga	gaaagaaaaa	30660
ggaaggaagg	aagggaagaga	gagagagaga	gagaaagacc	tagtcaccaa	aagcaagaga	30720
ttttttaaat	gctactattt	tttgggcatt	tactaatcat	attgctatgc	tctgcaccca	30780
agctaagtaa	tttaaataaa	ttatctcatg	tactcctcta	aaactaatta	ctgctgtgta	30840
aatggaggta	gaaagaaact	aagctttatt	tctgcctcta	ttgtttcttt	aacctgcctt	30900
gcttcctttt	tcagttgcac	ctaattggct	gtacttttag	ttttctttta	aactgcctta	30960
aatttcaaag	actaaagcag	caataactaa	ctgaatatat	ttatataaca	tgttattttt	31020
gtcatgttgc	tttccacccc	tggagacctg	ctctaaattc	acttggacgt	ttgaggataa	31080
atcatgtctc	ctagcagttt	ctgaaaatgc	agtttctactg	aaaatgcagg	catccagaaa	31140
tttagtaagc	aacttaaaaag	aaagtgttag	aatctcctat	gtattcattg	aaaaataatt	31200
tgaatttatg	cttagaaaaa	tagaattatt	attaagaat	cttacacact	catgttttta	31260
aatatcttca	ctaaggacca	attgtgtata	tgggtgaaca	ctgtcctcaa	agaacatgcc	31320
gggagaattg	ttgcagttac	cagagggtta	aatttggcaa	actctttttt	attaacgtgc	31380
cttttaatta	tgaatatagca	tactcacctt	agataaaatt	tgaaaaccat	ttttgtaaag	31440
tggtacaata	ttgaagaaag	ttgataaact	tcagaccaga	tttaagcctc	aaatctacct	31500
ctcttttacc	tggacaactc	attagcattt	ctgaacctca	cattttttct	ataaagttag	31560
aatactatat	tatagagttg	ttgtcagtta	aatgagaaca	gtgtctgatc	acaactagtc	31620
aacaaatgtt	cacaactctt	ccctccttag	gaaaagaatc	tcaaggcaga	cctgcttcgg	31680
gtctgtctcg	taaagaggta	ggaatcctct	gctcccggtg	aattgcttcc	taaccttctt	31740
tggtaatatg	ctattttttta	ataaagggtg	tggatcattt	cccattatac	actcaaaaatg	31800
tgtgtccatt	tcagggcagt	catggatgac	cattgcccct	cttttgaccc	cagattaaga	31860
acacctgctg	tagtatttta	attctgcctt	caaactcctc	tacaaaacaa	agacatcttt	31920
aaaaaataaa	attcttttagg	tgtcttgcag	ttgaatgcag	gaaaaccaga	gccccttatt	31980
tttgatagtt	ttgggaagaa	tgcagtgatc	gaacacaaac	ccataataga	caaataattt	32040
gcacagaaac	ttcataaaaag	tattgacctg	atttgccatg	tatttgccac	cttttaaaaac	32100
acacaactaa	atgtttaccc	tgtgtctaga	tccaaatggg	tgaagaaaaa	tgagtgacaa	32160
tacatctact	taagctcact	tacataattg	tggccatgcc	gttttttttca	cattacatta	32220
ttagaacatt	ggacaataag	tcaagaagaa	gaatgttcta	caaaataaac	tttaaaaatt	32280
ggtaagcatt	atgtgctttt	tccagaagac	atttttattt	gttgaatcaa	aggtggctct	32340
ttggcactga	gtagctccgt	ggagtcattg	cagtcctcat	tccctaatac	tgagcctgcc	32400
tgagtcgctg	ctgtcagttc	tccacttggt	gggatttcaa	actgcattaa	atccccctct	32460
atagctgtca	ctgccaagca	gttgactggg	ctctgtccta	cctttctgtt	ggtaattctg	32520
tttttaatcc	tgtgcttcag	tgtagtttat	ataaatcttt	acagagggat	aaaacttctt	32580
gtaattaatt	gtttgggtga	acatgtacct	gggagagcta	ttgggaaagg	ggccaaaattt	32640
gcattccagc	tccttttcac	cccacccttg	agctaacca	gtcctgtgga	ttcttccctt	32700
agcatctctg	gaaccttctt	ttcttttctt	ttttttatga	ccacctttcc	agtcctggcc	32760
cttcaaactt	gagtgacagc	aacagtcctc	ctgccttgag	tctctttcct	ccttctccca	32820

ggtgtgcatac	ggttgtcaaa	ctcatcttga	taaactactg	catcgattgt	ggctacactc	32880
ccttgctccc	acatcttcca	tagacccac	tgtctgtaaa	ataatattca	gtctggcctc	32940
aacctgtctt	tccagcctcg	gtgacacagg	tctattctgc	ctgagacact	tactatgaca	33000
cccttgcttg	ttcctggggc	tttgacacat	ttccaacgtc	ccattgttct	tcctctccaa	33060
atcagccaat	tgcccaagcc	ctgctcaaat	ctcccacctc	atgaagcctt	cttgatgcct	33120
cccagcacac	catgatctaa	tttcctgaag	taattatgct	aattgggcat	ttgaagaatt	33180
gttaaccgat	tatcaactaa	ctgcccctta	acattgcatg	tgtagtgtgc	ttcaaaggca	33240
gttaaattat	gtcatgttcc	ttacatttga	ctgagtgcct	cgtatcccta	ttcatgtttg	33300
ggggttttac	tttaagtcaa	gaaatttaat	cacatccatt	tggttttctc	tagagctgtg	33360
gttctcaacc	ttttgtgtgg	tagagaaaca	cttagagaac	atgttttaaaa	atatcctggg	33420
ttccaccctt	gagagataat	aagggtccaa	gggaacccaa	atatctgtgt	ttcaggtcag	33480
cttattggct	catcctatta	taccaactcc	tcagaaggcc	aagggtgggtg	gattccttga	33540
tctcaggcgt	tcaagaccag	cctgggcaat	atcgtgagac	tccatctctt	aaaaaaaaaa	33600
aaaaaaaaagga	ttagccaagt	gtggtggcat	gaacctgtgg	tcccagctac	ttaagaggct	33660
gaggcagaca	gattgcttga	gcctgggaag	tcgaagctgc	agtgagccat	gatcatgcca	33720
ctgcactcca	gcctgggtga	cagagcaaga	ccctgtctca	aaaaaataaa	aatgaaaaaa	33780
atctgtgttc	ccaagttcca	agtgatgctg	atgctgctgg	ttgcctttaa	gcatctcaca	33840
aagaacgaac	tcataaatgc	taatacagta	tatgtctact	gatactgaat	agtgggtttt	33900
ttttctcttt	tcttctatct	tgtgctcatg	ttgtgctact	tcttctcttt	agattgacct	33960
tgaagtgtgt	atttcagaac	cagaagggac	acacagtttt	gacggcattt	ggaaggccag	34020
cttcaccacc	ttcactgtga	cgaataactg	gttttaccgc	ttgctgtctg	ccctctttgg	34080
catcccgatg	gcactcatct	ggggcattta	cttcgccatt	ctctctttcc	tgcacatctg	34140
ggcagttgta	ccatgcatta	agagcttctt	gattgagatt	cagtgcatca	gccgtgtcta	34200
ttccatctac	gtccacaccg	tctgtgacct	actctttgaa	gctgttgggg	aaatattcag	34260
caatgtccgc	atcaacttgc	agaaagaaat	ataaatgaca	tttcaaggat	agaagtatac	34320
ctgatttttt	ttccttttaa	ttttcctggt	gccaatttca	agttccaagt	tgctaataca	34380
gcaacaattt	atgaattgaa	ttatcttggg	tgaaaataaa	aagatcactt	tctcagtttt	34440
cataagttat	atgtctcttc	tgagctattt	catctatttt	tggcagctg	aatttttaaa	34500
accctattaa	atttttttcc	ttaccttttt	atttgcattg	ggatcaacca	tcgctttatt	34560
ggctgagata	tgaacatatt	gttgaaagggt	aatttgagag	aaatatgaag	aactgaggag	34620
gaaaaaaaaa	aaaaagaaaa	gaaccaacaa	cctcaactgc	ctactccaaa	atgttggtca	34680
ttttatgtta	agggaagaat	tccaggggat	ggccatggag	tgtacaagta	tgtgggcaga	34740
ttttcagcaa	actcttttcc	cactgtttaa	ggagttagtg	gattactgcc	attcacttca	34800
taatccagta	ggatccagtg	atccttacaa	gttagaaaac	ataatcttct	gccttctcat	34860
gatccaacta	atgccttact	cttcttgaaa	ttttaacctt	tgatattttt	tgtgcctgaa	34920
tatttgttat	gtagataaca	agacctcagt	gccttccctg	ttttcacatt	ttccttttca	34980
aatagggtct	aactcagcaa	ctcgcttag	gtcagcagcc	tccctgaaga	ccaaaattag	35040
aatatccatg	acctagtttt	ccatgcgtgt	ttctgactct	gagctacaga	ctctggtgaa	35100
gctcacttct	gggcttcctc	tggcaacatc	tttatccgta	gtgggtatgg	ttgacactag	35160
cccaatgaaa	tgaattaaag	tggaccaata	gggctgagct	ctctgtgggc	tggcagtcct	35220
ggaagccagc	tttccttgcc	tctcatcaac	tgaatgaggt	cagcatgtct	attcagcttc	35280
gtttattttc	aagaataatc	acgctttcct	gaatccaaac	taatccatca	ccgggggtgt	35340
ttagtggctc	aacattgtgt	tcccatttca	gctgatcagt	gggcctccaa	ggaggggctg	35400
taaaatggag	gccattgtgt	gagcctatca	gagttgctgc	aaacctgacc	cctgctcagt	35460
aaagcacttg	caaccgtctg	ttatgctgtg	acacatggcc	cctccccctg	ccaggagctt	35520
tggacctaat	ccaagcatcc	ctttgcccg	aaagaagatg	ggggaggagg	cagtaataaa	35580
aagattgaag	tattttgctg	gaataagttc	aaattcttct	gaactcaaac	tgaggaattt	35640
cacctgtaaa	cctgagtcgt	acagaaagct	gcctgggtata	tccaaaagct	ttttattcct	35700
cctgctcata	ttgtgattct	gcctttgggg	acttttctta	aaccttcagt	tatgattttt	35760
ttttcataca	cttattggaa	ctctgcttga	tttttgctc	ttccagttct	cctgacactt	35820
taattaccaa	cctgttacct	actttgactt	tttgcattta	aaacagacac	tggcatggat	35880
atagttttac	ttttaaactg	tgtacataac	tgaaaatgtg	ctatactgca	tactttttta	35940
atgtaaagat	atttttatct	ttatatgaag	aaaatcactt	aggaaatggc	tttgtgattc	36000
aatctgtaaa	ctgtgtattc	caagacatgt	ctgttctaca	tagatgctta	gtccctcatg	36060
caaatcaatt	actggtccaa	aagattgctg	aaattttata	tgcttactga	tatattttac	36120
aattttttat	catgcatgtc	ctgtaaagggt	tacaagcctg	cacaataaaa	atgtttaacg	36180
gttaaacagt	ca					36192

<210>	5270
<211>	3119

<212> DNA
<213> Homo sapiens

<400> 5270

atgtccaaat	cactacttgt	aggatTTTTct	acatgaactt	TTTTctagga	ctttgggttac	60
tatacatatt	gtatatTTTta	agaattcTTTt	atacaattTTt	aatatactgc	aatactgcag	120
TTTTtgacaa	TTTggattcc	attTggTata	tgaattTTTtg	cattcattat	tgaataactc	180
TTTTaatatt	TTTgagcaat	gattatactg	CTTTacCTTg	TgtcactTTTt	TTTTTTTTta	240
ggaaaaactc	atgttccagt	atattTctct	tacagagtga	agtcattaca	gcactgtatt	300
tctgtgttga	catttgttgg	cagtgtgcta	agtaatgttt	TTTaaagcac	aggcttgagg	360
actatggTTt	acatcctgtt	ggaaacattc	caaatgggac	ttgtgtatta	taccaggag	420
gctctcatat	ataccatcTT	ggcatctgta	ctgatgaata	agttataatg	aacagTTaaa	480
aatgctcatt	gaaaattaaa	Taaaacaaaa	aggcagTTat	ttcatgcttg	gtcaaaaaca	540
tcaatacctt	tccaattaac	actgagaaaat	taaggTTaag	attctccttt	tgtactggga	600
aacaggctgg	aggactatgg	tcctcaagtt	tagaccaaga	ggactatggT	ctcaaggTtc	660
accatgagaa	atgtgttgaa	cattTTtagta	tgtcttattg	tataattTTTt	ttggaggggg	720
ggatggagtt	tcgctgttgt	tgcccaggct	ggagtgcAat	agcacgatct	tggctcaccg	780
caacctctgc	ctaccgggtt	caagtgatTc	ttgtgcctca	gcctcctgag	tagctgggat	840
tataggcatg	caccaccatg	cccagctaat	TTTgtattTT	tattagagac	agggtTTctc	900
cgtgttggTc	aggctggTct	caaactcctg	acctcaggTg	atctgcctgt	cttggcctcc	960
ggcgtaacac	TTTTtaagac	cagtgtaaCa	gaaagagaat	gtagccattc	tagccaccgt	1020
Taaaagatac	acagtgaggT	gttTgtgtTT	gtTTTTTTaa	Tgatgaaaag	TtacacattT	1080
TTTggagaga	aaagtcttag	ctgaaggTaa	atcaatggaa	aaatgaaatt	TattTTTaat	1140
attactacta	Tatgaattat	ctTTTTTTaa	actTgtagat	aaaagtgtTc	cagtaatcag	1200
aaaatcctca	agaaaattga	cttcattatt	Tggaaggaaa	attagtattT	TTTTtaatat	1260
Tatatggacc	atctgattat	attTtattTa	Ttcattctatt	TatggTatgt	atgtataaatt	1320
ctatattaca	ctgtcaaata	Taaaatattg	Ttatatgagt	agaaatcact	TaaatTTTTt	1380
ttgtgtttgt	gaatttgaaa	cagtgtaaGa	aatcactTTTt	aagaaaacat	TTTTtagaact	1440
ccctcgTTTT	TTTTTTTTTc	TTTTtgaaac	agggtctcac	Tctattgccc	aggctggagt	1500
gcactggcgt	gatctcggtc	cactgcacct	Tctgcctacc	gagttcaagc	gattcttTgt	1560
cttcagcctc	ctgagtagTc	TTTTactata	gggcctgccc	ccgccatgcc	tggctaattT	1620
ttgtattTTT	gtagagacag	ggTTtcacca	Tgttgcccag	TctgtTctca	aactcgTgag	1680
ctagagctac	Tcgcccacct	ggatgtccCa	aagtgtcTaga	Ttccatgggt	gagtcaccat	1740
gcttggccac	attTTtagtat	Tctaataaaac	agTtggtcat	cagaactTTta	aaatggTtagc	1800
ctacagaaac	atacaattTT	gaattTaaCa	gagTTTcagt	aaatattTcc	agaattaatg	1860
aagcatgtta	gctTTaatTT	TTTcaattgt	gagagaagTa	catttataaa	aattaagagg	1920
TtaagaggTt	atagTTataa	gggaaaaaac	Ttctgtatcg	attaactcct	aaaatatcag	1980
Taccagcatg	gaattatagc	accacctTgt	ggTtaacatg	ccagtattTT	acctTTTgtt	2040
aaaacaagtg	attTcccatc	aaacaggata	atattTTTtc	cTTTTtgaaa	aattcaattT	2100
Taaaagaaaa	cattTTTtgaa	gtTTTcttat	ggaagataga	aaaaaagTTa	agtctctTtc	2160
TaccctTTct	TTTTTctTTt	atatagtTca	gatatacaca	cagagaaggg	actTaaaaca	2220
TTTctaattc	cTagtTTtat	atacagtTgt	caaaatataa	gtaagtatat	attgaaaata	2280
TaaaatatTT	catatatgtt	atcaggTgga	aattTtagaat	ccaaattTtc	TtaaactTTta	2340
ataactTgtc	Taacaactct	ctaataggga	ctaaaaatca	actcaatata	TcatacattT	2400
acactTtaca	agagtctTTta	Tctagacaac	ataattTTTtg	gaaaaataaa	gcaaattTcaa	2460
ctttattTgga	gttattTggac	agatcagcaa	attgttattT	TaaaaagTTt	TcttTgtTtag	2520
gcaattTggT	aagtTgTttc	tagTtataaa	ctagccactg	Ttgattaaact	TgagaaggTg	2580
aagcagggga	gtTctgaaga	gattacctag	agctacataa	ccctaagTTa	agTaaaattT	2640
TcactTTcat	TctTTTcatt	ctctcataaa	ctggtTgaaa	aaacactgTa	ctaccaacaa	2700
aggTgtcagt	TggtTgtTgt	gccctgtTcta	TgttatgTctc	TgaataggTc	TcggtTaaaga	2760
Ttatatggaa	atactataaa	gaatacataa	ggTaaaatac	tagTcagaaa	gggtTcagaa	2820
gaagtTtagca	Tcaactgtat	gaaaattTcta	ggTaaagcta	agtactattg	agTtggaaaa	2880
aagTaattct	ctcatgTTtg	ctTgtTTTtc	TgtactgtTt	TTaatgtTga	TgtTgtTaata	2940
TattTTTaaaa	ataaaactTg	aaaacgtTtg	gactTTTgtTt	catgccattc	attactcata	3000
actTTtagata	actgatacac	TctTcaggaa	gcataaaaaat	Taatataacc	TtctcaattT	3060
Tataaactac	aacactTTTt	gagctcaaat	aacattTgtaa	ctTtgattTt	TactTTTtta	3119

<210> 5271
<211> 216
<212> DNA

<213> Homo sapiens

<400> 5271

aatacgggtga	aaccctgtct	ctactaaaaa	tacaaaaaat	tagccgggcg	tggtagctgg	60
cgcctgtagt	cccagctact	cgggaggctg	aggcaggaga	atggcgtgaa	cccgggaggg	120
ggagcttgca	gtgagccgag	atcgcgccac	tgcactcctg	cctgggcgac	agagcgagac	180
tccgtctcaa	aaaaaaaaaa	aaaaaaaaagaa	aagaat			216

<210> 5272.

<211> 1542

<212> DNA

<213> Homo sapiens

<400> 5272

ctgcctcacc	tctccccaga	gtgtgccggg	gcagataact	tagttgttct	gagagaggtg	60
acccccctctc	agtgtccatg	agtcccagat	gaattggcca	agtcctagaa	atagaggggc	120
tgcagagcgg	ggaggaagag	gtcccaatga	ccagcccttg	actgccaccg	tttgtcactg	180
gccccctggc	cctgttcccc	tgatcccagt	cagatgccac	atTTTTataa	taaaactagg	240
gctgagcagg	aaggcgctgg	caggagtcca	ttaccttgct	tattttcaaa	ctcttcctaa	300
cccttctgtc	ctgggtgttg	tttgacctga	aagatgaaga	gaacactgct	gtcttctgtc	360
atctgtcttt	ctgcttcacc	tgacacaggg	caagccccgt	ggcagtggcc	agcgggtcact	420
ggggacagtg	ctgaggttac	ttatcctgag	aaacccttgc	acggcctgtc	ccgcagagaa	480
aagacagccc	ttccgggtcc	ctggtttggg	ctgagtcgtg	ggaaaggacc	ctagggcatc	540
acaatcgcag	cctgtaccct	gcagctcaca	gagtcfaatca	gtttgggttt	atttgcattt	600
gaacagaaac	cttgagaaaa	agaaagccaa	tttgtttatc	ttctagggga	taaaaatagg	660
caagtgtggc	agccctgtgg	ccacgcaggt	cagacactgc	agcagtgaca	ctgggggttt	720
attaatcaat	aggatgtagc	tcacttgttc	tgtcctttta	aaaaaaaaaag	cccaccctgg	780
agaagagatg	cttggcccag	ctcctacaca	agggcagcag	tcattctccg	tccagggagc	840
tcttctggag	gtttttgcaa	gtagattcta	gagaactgag	agaacaagaa	gtcttcccca	900
ctctgggcac	atggaatctt	cattcaaaga	gtttgggttg	aattgagagc	tctcagtttt	960
gcatatcagg	taactatgat	gtgaaaagat	gaagcggcct	ctttacctct	cagagtcagc	1020
ccagaccctc	ttcgccctccc	ctcctctcag	agaagctccc	tcgtcccttt	ctcctccttt	1080
tgactagagc	tagtgggtgg	agagagtaac	tgaacgggaa	tttcttagtg	ttattctcta	1140
tcaataatat	attttaattg	tcagtgtctat	agactgggtg	gctgggggtt	gggagctggg	1200
ggctcttgaa	aatcaccaag	tggcagaaag	gaagttatag	gaagaacata	aaggcttagt	1260
gccagtgggtg	tcaggtaatg	catattgata	cctcaactaa	aagaacattt	ggggctttat	1320
taaaattgac	taattcttcc	aaagatagca	gctaaaggag	gacttagatg	aatagaggag	1380
ggaggagggt	tgcaggacgg	tgaagccctt	tgcttccagc	tctctgcctg	ctcagccatt	1440
gctccgtccc	tctgcagtta	gattattcct	tgcagatagc	aatcaactgg	aaggaagtgt	1500
ctgtgtctaa	tttgcattgag	attattttaa	acaacaacaa	aa		1542

<210> 5273

<211> 856

<212> DNA

<213> Homo sapiens

<400> 5273

gggaaaatta	tcttcatttg	cagccagcgg	ctgacaaggc	acacgaacca	ccaggtttat	60
aaaattccgt	agtgtaccag	tgaccatcag	cctgtgctga	cattgcagat	gctgctttct	120
tctctaattg	ctgattatga	actgggttaa	acaatgtctt	tcccaccagg	gctccgaaag	180
gggttccccct	tctgttttag	tcggagcgat	cggcagtcac	tacacaggct	ggaacctgag	240
aggcacaaaac	tcagggcggg	ggtattctct	gttggtgcct	ggcttgccctg	ttggtcctgt	300
ccctgttctt	cttggaaggt	gaaattatgg	gtaaagcagt	ccctttgcag	caagcaccct	360
ctctctagct	ccactctact	gaccttcagc	ttttgtcttt	ggaagggtgg	acgtgatgag	420
ctgtgaaccc	tggaaagcatt	ttcatccagc	ccaccaatct	gttgagagca	tggtgctatc	480
agggcaaccc	ggtggctctt	cagacttccc	agtgggtgag	ctgtgcctgc	ccttggccag	540
ctccactgtg	tgaagagggg	aaagagggga	acagctgcag	ttttaaatgg	ggatagtcct	600
caactcctca	gcacagagaa	gggaaaaaag	agtccagggc	tgtttagaaa	agttcgggca	660
ttttcccttg	actagctgtg	gtagggcatg	aaaagtttga	gggggtggctg	cagtcaactc	720

<400> 5281
 gggccgggcg cagtggctca cacctgtaat gccagcactt tgggaggctg aggtgggcag 60
 atcacgaggt caggagattg agaccatcct ggataacaca gtgaaaccct gtctctacta 120
 aaaatacaaa aaattagccg ggcattgggtg caggcgccctg tagtcccagc tactcgggag 180
 gctgaggcag gagaatggcg tgaacccagg aggcggagct tgcagtgagc cgagatcgtg 240
 ccactgcact ccagcctggg tgacagagcg agactccatc tcagaaaaaa aaaaccaaag 300
 aa 302

<210> 5282
 <211> 14161
 <212> DNA
 <213> Homo sapiens

<400> 5282
 tcacttttct aacaggcaaa ggaaattttaa acaaaagaat caaatgtgca agagggttcgt 60
 tgccctgtta ctgtctgtgg agatgtgcat ggtcaatttc atgatcttat ggaactcttt 120
 agaattgggtg gaaaatcacc ggatacaaac tacttattca tgggtgacta tgtagacaga 180
 ggatattatt cagtggagac tgtgactctt ctgttagcat taaagggtatg attattgaaa 240
 ttcaattttt ttttcaagat ttaaaccagg caaaaggcaa gaatgacagt attgcatatc 300
 atctgtttta tgggtctgttc agtttatagc cccttaaaat aataattggg tttacatctt 360
 tttaaaggag aggtgaaaag gataacttct gtgtattccc gataaatgta tcattctctc 420
 gagtagtcca tagctgaagt cttggaatca tatttgactt tatcacttat ccgttatatt 480
 gagtcagtag acaagtcttt ttaaactcct gctttgaaaa gtctgttgtt cctgtctctt 540
 tctattttca cacagtttat cacttcacaa ttcgattgtt acaatagctt agtaactaat 600
 atttctgctt ccaagatctg atcccccca aatccacctg gcatacgctg gccgatgaaa 660
 tctcttattt aaccttttta tattgttact tcctgttgat tgccgtgttg ctatagaatc 720
 aaattcaaac tccttgcttg gccttctata gtctagtctg aatttttgcc tgccagcggg 780
 tggtagcata aactctggct caaatcaaag tttcttctta ttcagtgtc tggactctgt 840
 ttattttccat agtcgatttc cccacgagg ttatcctgtc cctgatttct tacctttctg 900
 ccaagactca gctcaggctt cacttcctcc atgtaacctt caaccatttt agccttatct 960
 cttctgctct aaattactat gaggaaactt attctcccag cccttattta tgctgcaaaa 1020
 gtggcttatt gccttctatt acttattatt ttacatatgt ccttagtgag gttagtcctt 1080
 caacagcaga agccatata tacatgggtc tgggtcactt aactgcaggc atacattctg 1140
 agaaatgtgc cattaggtga tttgtcatc tttggaactt acacaaacct aggtgggtata 1200
 gcctactgca cacaaaggct gtaatggtat agtctcttgc tccagccaac atcgtagatg 1260
 taatctgtta acaaaaatgc tgcccagcac atgactgtac ttgtgtagat ctggcatctg 1320
 gctttatagc accaaactta cgtagacac ataacggatg cttagtaaaa tatgtatgaa 1380
 ttgaagtaca tacttgacgc ttttagctta atttgcagaa tccagtgtct tttcgtatct 1440
 cttatcagat gcattcctaa ctaaatagtc gcttatgttt tttaatagaa aggaaactat 1500
 taatacattt gaaatcttgc ccagttttgt caagggcctg tttttgtgtt attattggca 1560
 aatccaatct tcctgtggga aataaaaaat gaaaagggaa gaagttaatc tgtagagtct 1620
 gtctcagctt caaacctgtg attttcacta ctcattcagc agtaagaagt catagtgttc 1680
 tagaaagatt taggaaaagta gtaataattt gatgatgaag ataatagaag caaagtatca 1740
 gatacaagtt tattatagta atataagtat tagttaaagg ttctgatgag ggttgtcgaa 1800
 acctgatgaa aaaggatgat tataataaac acgtcaaatg ttaaccagta agacctgggt 1860
 atgaataagc aagtttttta ttttgaaact gaaattaaca tttaatatac tgggtggcaa 1920
 aagcgccgtg tttaaaaatg ggtagagac tgggtgtact cacatgacac tagtaaaaaat 1980
 gtgattttac tatgggtttt actccttttc ttcagggtgc gttatccaga acgcattaca 2040
 atattgagag gaaatcacga aagccgacaa attacccaag tatatggctt ttatgatgaa 2100
 tgtctgcgaa agtatgggaa tgccaacgtt tggaaatat ttacagatct ctttgattat 2160
 cttccactta cagctttagt agatggacag gtatgtatat gtgtgcttac atctgggag 2220
 gaggtaaatg gaagcagaga ttgactattg gtaagctggg gtctagattc atatgacctg 2280
 tgtttctgca tctcctcggc cttttcctcc tccttccctt atacttaaaa tttcaaagca 2340
 gggaagtgga taagtttcac atacatttgg accagcaaat tttcctgttg ttctcagata 2400
 tgtatgtaaa tcttttaacc aaagaatatg ctgtgctttt taagatatcg ataaacatta 2460
 taaataaatg ttttaagacac tgatgtatag tactagcaaa gcaagatgtt atttaaaact 2520
 atctctgcat atacatgcag tgtctgctgg ttacatgaa taacttttca tttctatttt 2580
 catggtaact gcaaatgtta tattgtgtat tacaccttcc ctgagaagtg aatgcttggc 2640
 tgggcacagt ggctagtact ttgggaggcc aaggcaagag gaccgcttga gttcaggggt 2700
 tcaagaccag cctgggcaat gtagtaagac cctgtctcta caaaaaaaa aattttaaaaa 2760

ttagctagggc	atagtgggccc	gtgcttgtgg	tctagctact	caggaagcta	gaggtgagag	2820
gatctcttca	gcccaggaag	ttaaggctgc	agtgagccgt	gatccagcct	gggcttcagc	2880
ctgggcaaca	gcaaaacccc	atctcaaaga	acaaaaaaag	aaaatagaag	caaattgctat	2940
ttctgcattt	gctgtaacaa	gtagtgcaga	catgtcatga	aacattcaaa	agtataagaa	3000
gaaattatgc	aaattttccta	tttcaatttc	tagagataat	caactgtaagc	atgaactgat	3060
ttaaatttaa	atataaaaaca	aaagccgggc	aagttggctc	ctacctgtaa	tcccagcact	3120
ttaggaggcc	aaggtgggtg	gacacctga	ggtaggaggt	tcgagaccag	cctggccaac	3180
atggtgaaac	cccattctcta	ctaaaaatac	aaaaattagc	cggggatggc	attgcatgcc	3240
tgtagtccca	gtcccagcta	cttgagaggg	tgaggcagga	gaatcacttg	aacctgagag	3300
agacagaggt	tgcagtgagc	caagatcgta	tcacggcact	ccagcttggg	tgacaaagtg	3360
agactccatc	tcaaaaaata	aaataaataa	atataaaaca	tataataaaa	ctccataatt	3420
cttaaattat	gaaagccag	agttgtcaag	aatgtaataa	attctctctt	agactgctcg	3480
tgggaatata	atgttggttat	aactttccct	gtgtaatcct	gacagtcttt	tttctcagcc	3540
atgatttttg	acactgccgt	gattaatttg	aaaggacgat	actttgcctg	gacttggtta	3600
aagaaaatgt	gaatttataa	gatgttaaat	tttaattaag	gttggttttta	attgttttga	3660
agcaacatag	tcttcatttaa	taataaaatt	gctggacaga	atgattttta	aaagacagcc	3720
tatcagtttt	aatgaagtat	ctagtttttta	aaatgggtgc	gttagtagag	cttttatata	3780
tttttccctt	cctccttccct	tcctttcttt	ctgaaaagtt	actagaaaag	aaataatagt	3840
gaacaaaact	gatctagaag	aaaagatgga	aggcacataa	aacactagga	atgaaataag	3900
gcataattat	aactatgcag	gagctcgtgt	atcacaagaa	caggtgcagc	tttagtgcac	3960
taagtttgaa	aagctgaatg	aagcttacta	tagtaaaata	ccagttatta	aaattggctt	4020
gcagaaattc	gtccaatata	agtaaacaac	caatagcaac	caggtgtaaa	tagttttata	4080
ggctaattct	accaaaccct	taaggaacat	ataatttctg	tgttctagaa	cttgggaaaa	4140
gatggagagt	tcaaaactca	caccgtatgc	ctagtataac	ctcaatgcca	aaccagacgt	4200
ggcacgcaca	gaaaaataaa	atcagacca	agtcatttgg	aaaaaaaaatt	cctatatatta	4260
tgattcaaaa	ctcagttatt	ttataaaaata	ataatatttaa	gtggataaag	aaacgccagt	4320
tgtactatca	gctaaacatt	agaaaccttc	tcactaggcc	aggtgaggtg	gctcatgcct	4380
gtaatcccag	cactttggga	ggccaaggcg	ggcggatcac	ctgaggttgg	gagttcaaga	4440
ccagcctggc	caacatggag	aaaccctgtc	tctactaaaa	atacaaaatt	agccaggcat	4500
ggtggcacat	gtctgtaaac	ccagctactc	aggaggctca	ggcaggagaa	ttgcttgaac	4560
ccggaaggcg	gaggttgccg	tgagcccgaga	tcacgccatt	gcactgggca	acaagagcga	4620
aactccgtct	caaaaaaaaaa	aaaaaaaaaaaa	atcaaaatca	gaaagaaaat	gcttggttaa	4680
acttacgtta	ttctctctga	ttcagaatac	ctagagcatg	gacttgaaac	taggtagttt	4740
acaaaaaaca	aaacagaaaa	catttgtatt	atttccattt	attttagaag	tcctggccaa	4800
tgcactaagc	aataaaaaga	attaaaacgt	ataaacattg	agaagaaaaa	acaaaaatag	4860
ttttgcaaat	gacttgatta	tgtacttaga	aaatatgaag	gaactgaaaa	tttattgtag	4920
ccagtaacag	gaatcagagt	gtttgctgta	agagaaacaa	aaaattgtat	atatcagcaa	4980
taaccaacag	aagctgtaat	gacagctggg	tacagtggca	tgacactgta	atcctagctt	5040
cccaggaggc	tgaggcagga	ggattgcttg	ggcccaggag	ttcatggctg	cattgcgcag	5100
tgatcaaggc	tgtgaatagc	tactgctctc	catcctcagc	agcacagcaa	gactccatct	5160
ctacagaaaag	aaaagaaaag	aggggaagtg	ggagggagaa	aaaaaagaaa	gaaagaaatt	5220
taatggttag	taccaaggat	ggggatacca	ttgaccagag	aaaaggaagg	gagggagggg	5280
ggggaaaaaa	aaaaaaagaa	atttaaatgt	gggtccccaa	ggatggggat	accattgacc	5340
agagaagggg	taaaagaagaa	aaaatgatgg	acaaaatatg	tttaaatggt	ggcactatct	5400
ggactgacac	ttttaaccat	tatttactct	ttgttaactg	tttgaggtta	gtaaaacaaa	5460
tacattctct	tttggttaatt	catacataga	tattctgcct	ccatgggtggc	ctctctccat	5520
ccatagacac	actggatcat	ataagagccc	tggatcggtt	acaggaagtt	ccacatgagg	5580
taaacttaat	ttaaaaaaga	agaagaaagg	aaaagaaaat	ataaccacat	tttgaggatg	5640
ataaagtatg	actgataata	atgtgtaaca	tgtacttatt	tttcttggcc	agggcccaat	5700
gtgtgatctg	ttatggtcag	atccagatga	tcgtgggtgga	tgggggtattt	caccacgtgg	5760
tgtgtggtac	acattttggc	aagacatttc	tgaacacctt	aaccatgcca	atggtctcac	5820
actgggtttc	cgtgccacc	agcttgtaat	ggaggtatgt	actttcctga	cagaatgatc	5880
tttatttcag	attagtatat	acttctgtaa	taaggcatta	tgacttaact	aagaaacatt	5940
cctcaccatt	tattacctag	gtgaaaagag	gaaaaacttg	ctgggttttag	caagtagggg	6000
aagcactagt	agaccagagc	agaattataa	ctcatttttg	aaattgagac	ttagaaaaaa	6060
gttacaaaaa	tagtaccoca	taattccctg	tatgcttcat	tcagattcct	gactgtaaat	6120
attttactat	atgtgcttta	tcattttgtg	tctctcttcc	tcttcacccc	tcacactttc	6180
ttctgaacca	tttgaatatc	tgttgccagac	agatactcct	ttactaccaa	ctttctatgt	6240
gtatttttga	aaattaagga	cacactgtca	cataaccacc	gtatagttaa	cacagttggg	6300
aaatttgtgt	tcatatagta	ctgttatatta	atatgaacac	tttattcaaa	ttttgctaata	6360
tgtctcacta	atgtctttaa	tagcaaaatt	taattttttg	tgcatactgt	atgtgcatag	6420

tcgaatccaa	agattaggtt	gtattcattc	tactttgatg	tggaaatcct	ccgattttca	6480
ttgttttcca	cattcttgac	atthttggaag	agtaggagca	ttttatctta	cagaaatatt	6540
cctcagttgg	ggtttgccctg	atgttttccct	tgcagttagg	gattcaatgt	atgcattttt	6600
ggcagtcattg	acatagaaaag	atgggtgtgtc	ctcctccgtg	cattgtatca	agtggtccta	6660
aaatctgctt	gtctcaatgc	tgggtgggtggc	aacttttaatt	gcttaggttaa	gatgatgtct	6720
gccagatttc	tccactataa	tattaactgt	tatacaacta	ctaagggaac	ataaacaaca	6780
taatccctgc	agaccagtag	ggagtggtctt	caagatgttt	agagaaaact	tcgccagccc	6840
agtagaaaaca	agggagcatg	ataaaaaaaa	cacaaattta	catagtataa	ataaatttta	6900
ttatatcagt	gattataaga	aagagactaa	aatttttagcc	tgaagagagac	tcttagattg	6960
gataaataat	caaaatttag	ctgttattttg	ggatgtacct	aaaacataaa	tgattgggctg	7020
gacaaagtgg	ctcatgccta	taatcccagc	actttggggag	gccgaggtgg	gaggatctct	7080
tgagtcttgg	agtttccagac	cagcctggggc	aacatagtgga	gacctcatct	ctatatataa	7140
aaaaaaaaaa	agtcaaaaag	ttagctggggc	atgggtggcat	atgtctattg	tcccagctac	7200
tcaggagggt	gaggtgagag	ggtcacttga	ggccaggagg	ttgaggctgc	agtgagctat	7260
gacgtaccg	ctgcactcca	gcctggggcaa	aaggggtgaga	ccttgtctca	aaaaaacgag	7320
gaaaaagaaa	aagacaccac	aaactagagg	taagagttgg	aaaatgggat	attggtatat	7380
caagtaatta	atcaaaaatat	caaaaatata	gctaattgagc	tggcgtgggtg	gctcgtgcct	7440
ctattcccag	cactttggga	ggctgaggca	agcggattgc	tggagctcag	gagttcgaga	7500
ccagcctggg	caacatgggtg	agatcctgtc	tctactaaaa	tacaaaaaat	taacctgggtg	7560
tgggtggcacg	cacctgtagt	cccaactact	cggggctgag	gcaggagaat	tgcttgaacc	7620
caggagttgg	agggttgcatg	gagtctagat	cgcaccactg	cactccagcc	tgggcaacac	7680
aggatgtgtg	tgtgtgtgta	tatacacaca	tacatacact	aatgtatgta	tatatatgta	7740
tacatatata	cacacatgta	tgtgtgtata	catatatgca	cacgtatata	tacacatata	7800
cacacgtata	catatatgcy	cacacataca	tgtatacata	catatatacy	tgtatgtata	7860
tacacatgta	tatacacatg	tatacatata	tgcacacaca	tatacacata	tatacacgta	7920
tatatataca	tgtatatata	catacattaa	ttagcatgta	tgtatacaca	ctatatataa	7980
tactatagct	aataatatga	atgagatagg	ctctaataaa	aggattattt	agaaataaag	8040
agattattga	tgaaaactgg	cccagttctc	taggaagaaa	gtattctaaa	tttgtatttta	8100
cctagtaata	gcttcaaaaat	atataaagaa	aaaattggca	taattcatga	gggaaaattg	8160
agaaattaat	tatgattgtg	ggagaaattc	agtacacatc	cctgccaaga	tttcaagcat	8220
agatacggca	aaacaacaat	tagcgagctg	catttaacag	actcctaggc	ccacgaattg	8280
cacagtattc	tttacaggta	cacaaactat	taaagatgga	gaccttatat	agtaatatag	8340
acgactacat	ttccacagag	agtacctgta	gttttttgat	ttagtttttt	ttaaatgtgt	8400
ctgtgtcaaa	atcataatat	tataatgaaa	taatgaattt	gttttttatcc	tgcagggata	8460
caattgggtgt	catgatcgga	atgtgggttac	catttttcagt	gcacccaatt	actgtttatcg	8520
ttgtgggaac	caggctgcta	tcatggaatt	agatgacact	ttaaaatatt	ccttgtgagt	8580
aactgtaaat	tttaattgta	tatactttca	gaaggaaaat	tttaaatgtt	aaaaatagaa	8640
gattttctgtt	tctgaaattg	gatgaggagt	atagcaaagc	ccctctccag	caaaaataac	8700
cattagctgg	agaacattat	ttttaaaaaa	taattttttca	aagctttttg	aaattgtcct	8760
aagggcatac	agcaggtgga	gaaacagtta	attcaagaaa	acctaactaa	tctcagtaat	8820
aatagccgta	gtctgtggca	tttgagctat	gacttgcccc	ctccaactcc	tcccagatcc	8880
ctctcacaga	aacgactaca	ggcgtctctac	gtgtgggttg	tatagtcagg	aggctaaggg	8940
attccccctc	ttcatcagct	cccagggctg	gggctgtggg	ttcactccca	gagatcagat	9000
gccagcatat	ctcacctctc	ctagtctgga	gttacaaaag	ctctactcct	ggtagacaca	9060
gtcaagcagg	ctgaggcccc	cttccctgcc	ccagctcctg	gggcagaagc	tctgctccag	9120
gcatgcatgg	cagatgagaa	tgctgggttt	cccaatgctg	ttaccccagc	acctgcttat	9180
aaaccaggtg	gtatcactga	gcctgcactg	gcacagaagt	tctgctcagg	aggaaaggca	9240
ggtcacagaa	gttcctcagc	tctgcctcag	aggacttatc	ttacttaggt	gatggagaat	9300
tccaaatctg	agtgtcttgt	ggaaagcagt	agatgtcatg	gtggagacca	attaagaggg	9360
ctgtaatagc	tcccatgata	ctaggagcaa	catacaaaaag	agcagagcaa	catgttgttc	9420
aacaaatagc	aacagggaaa	aagccaagaa	gagcccttct	gggatcacag	tcagccctgg	9480
gggacaagaa	ggctgtgcac	atgcactagc	cataccactc	caggagcagt	caagagtagg	9540
atgtggggta	ttcatataat	atthttcaagc	cacacataga	ttgtactgag	ttgaataatg	9600
tccccccaaa	aaaattcatg	tccacccaga	acctcaaaat	gtgatgttat	ttggaaatag	9660
gatcttttaca	gatataatta	ttaaagatga	gattgtactg	gattaggggtg	ggcctaaatc	9720
caattcgaat	gggatttttag	taagaggaaa	agaaacacac	acagggggaga	atgctgtgtg	9780
aagccagaga	ttcaagtgat	gcactctacca	gctaaggatt	gccagagcca	tcagaagcta	9840
gggagagggt	aggaaggatt	tttccttagag	ccttcagaga	gagcgtgggtc	ctcccagcat	9900
cttgcttttca	gactttgtagc	ctccagaact	gtgagaggat	aaatccccgt	tgtataagct	9960
atacagttcg	gtaatttgtt	acggcagccc	caggaaatgg	ataagtagat	tgatcaacaa	10020
atggtgtaac	catcactagt	atgtgagggt	taaacacaac	ctctcatcat	tgactgaacg	10080

acattcagtt	actctgatcc	aggagcacct	cctaggtagt	caggctttta	aataaaatca	10140
cactcatccc	tgacagtctg	gcagaatatg	tgcattgccc	aggttatacc	ctctctggac	10200
tgagtgcagt	atgaagatcc	aactattagt	ccctggctga	atgggaagcc	aaaatataaa	10260
ctccttcagc	tttgatagca	atctgcaagt	cacataacat	ttccggtggc	cattaggggtg	10320
agctttaaga	tctaactggc	caagggggct	taagtacaat	ctttgatcag	taagtggctt	10380
atgcctaccc	agagacagcc	cctcagtagc	caggctgtga	aagattaaaa	gaagtaaaaa	10440
cggtcaggca	cggtggtctc	tgctgtaat	cccagcactt	tgggaagccg	agggtggcgg	10500
atcacctgag	gtcgggagtt	caagaccagc	ctgaccaaca	tggagaaacc	cagtctctat	10560
taaaaataca	aaattagttg	ggtgtggtgg	cgcattgcctg	taatcccagc	tactcaggag	10620
gctgaggcag	gagaatcgct	tgaacctggg	aggcggcgcc	gatcacgcca	ttgcagtcca	10680
gcctgggcaa	caaaagtga	actcaaaaaa	aaaaaaaaaa	agtaaaaaaca	tccgagcagg	10740
gccacagggg	ctgcacacta	tgggggaagt	agactttaca	gttagttcag	ctaagtcact	10800
aaacaaaaat	aataaaccac	caaaaagaca	agatcagtc	ccaaggacat	gaattccaga	10860
gctactgcaa	tatgttatct	ataatgtcca	atTTTTcaac	cacagattat	aagacatgga	10920
aagaacaagg	aagtgtgacc	tctacacagg	aaaaaactaa	gcaacagaaa	ctgtttctct	10980
tggatagaac	aactaggcag	gagatgaagg	caggagaaga	cttgagcaac	actgtaaact	11040
gactgtatac	ctcatgtctg	taaaacaaca	cccaacaaca	gcagaatact	ttcctctcaa	11100
gtaaacatga	aacatagtca	tatgctagac	tgtaaaacat	gcctcaggca	atttaagaag	11160
attagattct	taaaaggata	ttctccaaac	acaaggaaat	gaaattagaa	atcattaaca	11220
tggctggatg	ctgtggctca	cacaagtaat	cccaacactt	tgggaagcca	aagtaggagg	11280
atcacttgag	gccagcctgg	gcaacatagg	gagaccccg	ctctacaaaa	aaatttaaaa	11340
attagccagg	tatggtgcca	agcacctgta	gtctcagctg	tatgggaggc	tgagatggag	11400
gatcacttga	gccagttga	tcaaggctgc	aatgagctat	gatcacagca	ctacactaca	11460
gcctaggcaa	cagagcaaag	accctgtctc	agaaagaaaa	aaacaaaaaa	aaaaacaaga	11520
agatttgaaa	tcagtaacct	atctttatac	ttgaggacct	agaaaaagca	gagtaaaact	11580
aacctgatgt	aagcttatga	aacgagggtt	agagttagaaa	taaacaaaaca	gtagaaaatc	11640
attacagaaa	aatcaacaaa	acccaaagtt	gatgctttga	aaagccttaa	ctagactggc	11700
caagaaaaaa	aggagtaaag	actcacatta	ccaaatcact	agagacctta	ctgaaataaa	11760
aaggattata	agggaatata	ataaataact	atatgccagc	aaattcagta	actttgataa	11820
aacgtactaa	ttcctaaaaa	gaaactactg	aaactgactc	aagaaatatg	aatcttgaat	11880
gacctttcaa	atgtgaaaat	attgagccag	catggtggct	cacacctata	aatcccagct	11940
ttgggaggcc	aagctgagag	gattgcttga	gactaggagt	ttgagaccag	cctggacaac	12000
atagcaggca	cttgtcccta	tttaatttaa	aagaatataa	ataaatgagt	gaaaaagtta	12060
aaactcccca	caaataaaa	gccaaggcca	attggcttca	ttgatgaagt	ccaccaaatg	12120
tttaagaaaa	ggaattggcc	agggtcgggtg	gctctaacca	gtaatcctag	cactttggga	12180
agccaaggca	ggcagattga	gcccgaggatt	caagatcagc	ctgggtaaca	tggtaaaacc	12240
ctgtatctac	aaagaatata	aaaattaacc	tgggtgtggtg	gctcagccta	tagtctcagc	12300
tactcaggaa	gctgaagtgg	gaggatcacc	tgagcccagg	gaggttgagg	ctacagtggg	12360
ccatgatcac	accactgcac	tccagcttgg	gcaacagagt	gagaccctgt	ctcaaaaata	12420
aaaacgagtt	aatgccaatc	cttcacaaac	acttccaaaa	aacagaagag	gaggactact	12480
gcattcattc	tgtcacacct	gcactattat	ccttgatacc	aaaagtagac	aaaggcaaaa	12540
acagaccagc	atattgttacg	aatacagata	taaaattttc	caacatacgt	accagcaacc	12600
tggatctagc	aatatgttaa	aagattatatac	accatgagca	agtgggattt	atcccaggaa	12660
tgctagggtg	gttcaaaaaca	tgaaaatcaa	tataataaac	catattaata	ttaagggatt	12720
aaaaaacaca	tgatcatctc	aatagaggca	caaaaataat	tggaaaaatc	cactagccag	12780
aaacactcaa	gaaaatagtg	atattaggcc	tggcgcgggtg	gctcacgcct	gtaatcccag	12840
cactttggga	ggccgaagcg	ggtggatcat	gaggtcagga	gatgagacca	tcctggctaa	12900
cacggtgaaa	ccccgtctct	actaaaaaaa	aataagaaaa	ttagccgggc	atggtaatgg	12960
gttctctgtg	tcccagctac	tcaggaggct	gaggcaggag	aatggtatga	accaggagg	13020
cggagcttgc	aataagccga	gatcgtgcca	gtgcactcca	gcctgggcga	cagagcaaga	13080
ctctgcctca	aaaaaaaaaa	gatatattata	gatattatta	ttattattaa	ataatattaa	13140
acaattattg	tttaattatt	taaacttgat	attattttaat	ctttaattat	ttaagctttt	13200
aaataataat	aacatttaga	aattgttatg	ccaggcacca	aaccagacat	tctgtcttct	13260
taaattttca	ccatagccct	atgaagcagt	tagttggaat	gggagcatct	gcagtgattt	13320
gcccatggcc	attccagccg	taagtgatgt	agtcatgggtg	ggaaagcagg	actgctgttt	13380
ctactacagt	gtcttgttct	ttattcattt	gtttcttttg	caaagtcaga	tcctttattt	13440
gcttcttttt	ttgccattta	cagccttcaa	tttgaccag	cgctctgctg	tgggtgagcct	13500
catgttacac	ggcgcacccc	agactacttc	ctataaattt	ctcctgggaa	acctgccttt	13560
gattgtggaa	gtataccttg	ctttttaaaa	tatatgtatt	taaaaacaaa	aagcaacagt	13620
aatctatgtg	tttctgtaac	aaattgggag	ctgtcttggc	attaaaccac	atcatggacc	13680
aaatgtgcca	tactaatgat	gagcatttag	cacaatttga	gactgaaatt	tagtacacta	13740

tgttctaggt	cagtctaaca	gtttgcctgc	tgtattttata	gtaaccattt	tcctttggac	13800
tgttcaagca	aaaaaggtaa	ctaactgctt	catctccttt	tgcgcttatt	tggaaatttt	13860
agttatagtg	tttaactggc	atggattaat	agagttggag	ttttattttt	aagaaaaatt	13920
cacaagctaa	cttccactaa	tccattatcc	tttattttat	tgaaatgtat	aattaactta	13980
actgaagaaa	aggttcttct	tgggagtatg	ttgtcataac	atttaaagag	atttcccttc	14040
atttaaacta	aattactggt	ttatgttgat	ctgcatattt	ctgtatat	gtcatgacag	14100
tgcttgcatc	ctatttggtg	tactcagcaa	ataaactttt	catttttaac	aaaaacattc	14160
a						14161

<210> 5283
 <211> 767
 <212> DNA
 <213> Homo sapiens

<400> 5283						
agaacatttc	atttgccagt	gtttaagcat	aaattctgta	cttcagggcc	acctaattggt	60
attttctaac	ttaattctat	aaatataaaa	taattggaat	aaagaaattc	aagggttgcc	120
tatgaattgg	tgtaagaatg	tttgttcaca	caagaatttg	cataatttgt	gacttttttc	180
tttcattgac	ctttttaaac	ttgtgaataa	taagattatt	ctttttaaaa	cacagacctt	240
ctgccttgaa	gatttgccct	ttctggacat	ttcatgtaaa	tggaattgta	cattatgtga	300
tcattttgtga	ctgacttctt	gcacttacca	taatgtcttc	aaagttgtag	catgtatcag	360
tacttcattt	cttcatagct	gagtgcactat	tccattgtat	gaatatgtta	tgtccattca	420
tcgggtgatc	aatactctgt	ggtttctact	ttttggctgt	tattaataat	gctgccatga	480
acatgtataa	actggatttc	atttctcttg	agtatatacc	taggagtgga	actgctggat	540
tacatggtaa	ttttagggtt	aactttggag	gaactgccag	acagttttcc	acagcagctg	600
caccattttg	catttccacc	agcagtgtat	gagggttcca	gtttatccac	atgtttgcaa	660
cacttattaa	ctgtcttttt	tattatagcc	tttctaata	aagtgttatc	tcgtgggttg	720
gttttcacat	acgcttttat	aaggcacttt	tcaagtgttt	ttttccc		767

<210> 5284
 <211> 473
 <212> DNA
 <213> Homo sapiens

<400> 5284						
ttttttgggg	ggacaggggc	tcactttggg	ttgccccagg	ctggagtgca	atggcccaat	60
cacaactcac	tgcagccttg	acaataaatc	agtttttagaa	tattttcatg	atttcagtct	120
ctctcttgac	ctgtgttgat	tttcattgcc	accaaccagc	cccaggcaac	cactaatcta	180
cttctgtcta	cagatttact	acttctggac	agctcatatc	agtggaatca	cataaattgt	240
ttttgtgcag	gtttttcact	agcgtgtcct	gaagttcctc	catgtcgtat	ttaacagttc	300
attcttttat	tcctaagcag	cttgccatgg	tgtgaatata	acacatttct	ctctatgcat	360
tcacagattg	atgtgtccat	ttgaaacatt	taggctat	ccaattttta	gttattaaag	420
taattattgt	catgggttgc	caatttggtg	aatttaccaa	gaatcttta	att	473

<210> 5285
 <211> 1204
 <212> DNA
 <213> Homo sapiens

<400> 5285						
ggccgcagcc	acagcttgca	cgttgcgccg	ggtgtgtctg	tgcgtgccag	ctgcatcttt	60
gcgtaccatg	tgtgcaaggc	tgtgtttggc	tgagtgttca	tgtgggccgt	gattgtgggc	120
atgtttctga	gtgtctgagt	gatgcctgct	ggtgtgggct	ggtgggtgtg	tctgcatgtg	180
cgtgtgtgtc	tggggagttt	caaaggagaa	agagggactc	accatcacgc	tggctcagcc	240
ttaaaaaggt	aggacatcct	gacacgtgct	gcaacatgga	tggaccttaa	ggacattgtg	300
ctgagtga	caagccagag	gcaaaggaac	aaacatgtga	tttctcccag	atgaggtttc	360
cggaggaggc	agatctgtat	ggacagaagg	tagcatgggtg	gttgccgggg	cagggggagg	420
agagaatgga	gaattagtgt	ttaatgggga	cagagtttca	gttggggaag	gtgaaaaggt	480

tctggagctg	gatgatggtg	atggttggac	aacactgtgc	atgcacttaa	taccactgag	540
ctggacacct	aaaaatgctt	acaatggtaa	atttcatgta	tattttacta	caatttttaa	600
aaaattggct	gggcgtggtg	gcttatgcct	gtaatcccaa	cactttggga	ggccaaggcg	660
ggaggattgc	ttgagctcag	gagttcaaca	ccagcctggg	caatatgggtg	aaaccccgac	720
tctacgaaat	atacaaaaat	tagcctggtg	tggtggcctg	cacctctaata	cccacctact	780
cagtaggcta	aggcacaaga	atctcttgaa	cctgggaggt	ggaggttgca	gtaagccgag	840
atcatgccac	tgcaaccacg	tctgggagac	agagcaagac	tctgtctcaa	aaaataaaaag	900
ataaataaaa	aaattagagg	ccaggtgtgg	ctcacacctg	tactctcaac	actttgggag	960
gctgaggtgg	gaggatcgct	tgaagtcagg	catttaagac	atgcctaggc	aacatagtga	1020
gaccttgact	ctacaaaaaa	attcaaaaagt	taatgagaca	tggtggcatg	tgctgtagt	1080
cctagctgct	ggggaggctg	aggtgggagg	atcacttacg	accaggattt	caaggctgca	1140
gtgagctgtg	attgcatcac	tgcactccag	cctggtgaca	gagtgaggcc	ctgtctcaaa	1200
aaaa						1204

<210> 5286
 <211> 1204
 <212> DNA
 <213> Homo sapiens

<400> 5286						
ggccgcagcc	acagcttgca	cgttgccg	ggtgtgtctg	tgcgtgccag	ctgcatcttt	60
gcgtaccatg	tgtgcaaggc	tgtgtttggc	tgagtgttca	tgtgggccgt	gattgtgggc	120
atgtttctga	gtgtctgagt	gatgcctgct	ggtgtgggct	ggtgggtgtg	tctgcatgtg	180
cgtgtgtgtc	tggggagttt	caaaggagaa	agagggactc	accatcacgc	tggtcagcc	240
ttaaaaaggt	aggacatcct	gacacgtgct	gcaacatgga	tggaacctaa	ggacattgtg	300
ctgagtga	caagccagag	gcaaagggaac	aaacatgtga	tttctccag	atgaggtttc	360
cgaggaggcc	agatctgtat	ggacagaagg	tagcatggtg	gttgccgggg	cagggggagg	420
agagaatgga	gaattagtgt	ttaatgggga	cagagtttca	gttggggaag	gtgaaaaggt	480
tctggagctg	gatgatggtg	atggttggac	aacactgtgc	atgcacttaa	taccactgag	540
ctggacacct	aaaaatgctt	acaatggtaa	atttcatgta	tattttacta	caatttttaa	600
aaaattggct	gggcgtggtg	gcttatgcct	gtaatcccaa	cactttggga	ggccaaggcg	660
ggaggattgc	ttgagctcag	gagttcaaca	ccagcctggg	caatatgggtg	aaaccccgac	720
tctacgaaat	atacaaaaat	tagcctgggtg	tggtggcctg	cacctctaata	cccacctact	780
cagtaggcta	aggcacaaga	atctcttgaa	cctgggaggt	ggaggttgca	gtaagccgag	840
atcatgccac	tgcaaccacg	tctgggagac	agagcaagac	tctgtctcaa	aaaataaaaag	900
ataaataaaa	aaattagagg	ccaggtgtgg	ctcacacctg	tactctcaac	actttgggag	960
gctgaggtgg	gaggatcgct	tgaagtcagg	catttaagac	atgcctaggc	aacatagtga	1020
gaccttgact	ctacaaaaaa	attcaaaaagt	taatgagaca	tggtggcatg	tgctgtagt	1080
cctagctgct	ggggaggctg	aggtgggagg	atcacttacg	accaggattt	caaggctgca	1140
gtgagctgtg	attgcatcac	tgcactccag	cctggtgaca	gagtgaggcc	ctgtctcaaa	1200
aaaa						1204

<210> 5287
 <211> 1204
 <212> DNA
 <213> Homo sapiens

<400> 5287						
ggccgcagcc	acagcttgca	cgttgccg	ggtgtgtctg	tgcgtgccag	ctgcatcttt	60
gcgtaccatg	tgtgcaaggc	tgtgtttggc	tgagtgttca	tgtgggccgt	gattgtgggc	120
atgtttctga	gtgtctgagt	gatgcctgct	ggtgtgggct	ggtgggtgtg	tctgcatgtg	180
cgtgtgtgtc	tggggagttt	caaaggagaa	agagggactc	accatcacgc	tggtcagcc	240
ttaaaaaggt	aggacatcct	gacacgtgct	gcaacatgga	tggaacctaa	ggacattgtg	300
ctgagtga	caagccagag	gcaaagggaac	aaacatgtga	tttctccag	atgaggtttc	360
tgaggaggcc	agatctgtat	ggacagaagg	tagcatggtg	gttgccgggg	cagggggagg	420
agagaatgga	gaattagtgt	ttaatgggga	cagagtttca	gttggggaag	gtgaaaaggt	480
tctggagctg	gatgatggtg	atggttggac	aacactgtgc	atgcacttaa	taccactgag	540
ctggacacct	aaaaatgctt	acaatggtaa	atttcatgta	tattttacta	caatttttaa	600
aaaattggct	gggcgtggtg	gcttatgcct	gtaatcccaa	cactttggga	ggccaaggcg	660

ggaggattgc	ttgagctcag	gagttcaaca	ccagcctggg	caatatgggtg	aaaccccgac	720
tctacgaaat	atacaaaaat	tagcctgggtg	tgggtggcttg	cacctctaata	cccacctact	780
cagtaggcta	aggcacaaga	atctcttgaa	cctggggaggt	ggaggttgca	gtaagccgag	840
atcatgccac	tgcaacccag	tctggggcgac	agagcaagac	tctgtctcaa	aaaataaaaag	900
ataaataaaa	aaattagagg	ccaggtgttg	ctcacacctg	tactctcaac	actttggggag	960
gctgaggttg	gaggatcgct	tgaagtcagg	catttaagac	atgcctaggc	aacatagtga	1020
gaccttgact	ctacaaaaaa	attcaaaaagt	taatgagaca	tgggtggcatg	tgcctgtagt	1080
cctagctgct	ggggaggctg	agggtggagg	atcacctacg	accaggattt	caaggctgca	1140
gtgagctgtg	attgcatcac	tgcactccag	cctgggtgaca	gagtgaggcc	ctgtctcaaa	1200
aaaa						1204

<210> 5288
 <211> 504
 <212> DNA
 <213> Homo sapiens

<400> 5288						
caactgggag	gcctcccttc	tccagaccca	tggggacaac	accacccagc	tactggttct	60
ataagctgct	gtatggctct	ggctagccca	ttcagagaaa	gcctctgaaa	gtacaaggaa	120
aaaaatcagt	ccaagagctg	tgaacaatta	gtgagccgat	tacaatacca	agaccacagg	180
cagacctgga	aggctaagt	agcccagggt	tgaagttcaa	gcttacttta	cttctggggc	240
acttcttggc	tgggtctctt	ccctggccct	tatctttctc	ctgggtctgtc	ttctcttctc	300
accccttttc	tttactcttt	cttcctttct	ctgcatcgta	ctccaccccc	actccagcta	360
ttacacagaa	tcgcgagaat	gttggattat	tcattttatt	tatgatgttt	tcttttttgt	420
aaaaatagag	acaaggctct	actatgtggc	ccaggctggg	cttgaactcc	tggcctcaag	480
caatctctgt	gccttggcct	ctta				504

<210> 5289
 <211> 332
 <212> DNA
 <213> Homo sapiens

<400> 5289						
caactgggag	gcctcccttc	tccagaccca	tggggacaac	accacccagc	tactggttct	60
ataagctgct	gtatggctct	ggctagccca	ttcagagaaa	gcctctgaaa	gtacaaggaa	120
aaaaatcagt	ccaagagctg	tgaacaatta	gtgagccgat	tacaatacca	agaccacagg	180
cagacctgga	aggctaagt	agcccagggt	tgaagttcaa	gcttacttta	cttctggggc	240
acttcttggc	tgggtctctt	ccctggccct	tatctttctc	ctgggtctgtc	ttctcttctc	300
accccttttc	tttactcttt	cttcctttct	ct			332

<210> 5290
 <211> 332
 <212> DNA
 <213> Homo sapiens

<400> 5290						
caactgggag	gcctcccttc	tccagaccca	tggggacaac	accacccagc	tactggttct	60
ataagctgct	gtatggctct	ggctagccca	ttcagagaaa	gcctctgaaa	gtacaaggaa	120
aaaaatcagt	ccaagagctg	tgaacaatta	gtgagccgat	tacaatacca	agaccacagg	180
cagacctgga	aggctaagt	agcccagggt	tgaagttcaa	gcttacttta	cttctggggc	240
acttcttggc	tgggtctctt	ccctggccct	tatctttctc	ctgggtctgtc	ttctcttctc	300
accccttttc	tttactcttt	cttcctttct	ct			332

<210> 5291
 <211> 5669
 <212> DNA
 <213> Homo sapiens

<400> 5291

ggatcaacaa	ctgcgtggga	agccggaatt	attggtgagg	ggcacagagg	ggatggccgg	60
cacgggccag	gcttggggga	atttggaagg	gaggggtctg	tgggcagggg	tcatcggtgt	120
gaaaggggtg	agggctcctt	tggggccgcg	tccctgtcct	gatgtggtgg	cgcttggtgc	180
ctgcgtgccc	cgccctcctg	tctggctctg	gggctgtggt	gcagccgtcc	ctggacaagc	240
tcatccgcat	agagtaagtc	cctggaggcc	ccccgggggc	acttgcgggg	ccacgctggc	300
tgaggcctcc	tgaccacgct	gtcctgggct	gggctgcctt	ctctccaccc	aggctgaggg	360
tcatccagca	caagggtggg	gccacggaag	ggcagtgggc	accagcgca	gatgggcgag	420
aggtgtttcc	cctgagcatg	gtcagggctc	acagatgaga	ggtgtttccc	tgagcacggt	480
ggaggctcat	agacgagagg	tgtttccctt	gagcacggtg	gagatgcaag	gaagagagat	540
gtttccctga	gcacgggtga	ggcttacaga	tgagaggtgt	ttccactgag	catggtggag	600
gctcacaggc	gagaggtcct	tcccctgagc	acggtggagg	cgcaaggatg	agaggtgttt	660
ccactgagga	tgggtggagg	gcaagaacga	gaggtgtttc	ccctgagcac	ggtggaggct	720
cacagatgag	acgtgtttcc	cctgagcacg	gtggaggctc	atagacgaga	ggtgtttccc	780
ctgagcacgg	tggaggctca	agaacgagag	gtgtttcccc	tgagcatggt	ggaggctcaa	840
ggacgagagg	tggttccctt	gagcatgggt	gaggtccaca	ggcgagaggt	atttccctctg	900
agcacggtgg	agggcgcaagg	atgagaggtg	tttccactga	ggatggtgga	ggtgcaagaa	960
cgagaggtgt	ttcccttgag	cacggtggag	actcacagat	gagacgtgtt	tcccctgagc	1020
acggtggagg	ctcaagaacg	agaggttgtt	tcccctgagc	acggtggagg	ctcatagatg	1080
agaggtgttt	cccctgagca	cagtggagga	tccagggact	ctcaaggccc	cggtgtgctga	1140
gccccggctg	tctgcagcac	tgtattgtga	agatcaccag	ggaaaagaac	cacgcctgct	1200
ccccagctac	tctgtgtctga	cctgaaagag	gccttggtgt	gcgtgggagt	ggggaccaac	1260
gttgccctgg	gtcacaggac	gcaccgggcg	gtccctgccc	tgccctccctg	ccatcccgtc	1320
tggagcacag	catgtgtcca	gagaggctga	gcagcccgcc	agggacagag	aggttgcatg	1380
accgcacagc	gagtcagag	gctgcgtgag	atggtagggg	ccggggagac	ccaccggcct	1440
cctcccctgg	agaagagcag	ctccacgatg	gccaaggtgg	ggccagctcc	tctggctcat	1500
gctagcccca	ggtgccactt	ccttctggac	tcattctgct	ctggtgcctc	gagctggctc	1560
aatctggcgg	gtcctgggtg	ggaaggtgag	ggggtgaggg	cccacaggca	ggtggcaagg	1620
agaggggtctg	ccttcctcag	gaggggtgct	ggagagggac	cacgtgggtg	ccaagtgtag	1680
acaccgcctg	ggtgtgggaa	aggggcatca	ggagagcagg	gccgggggtca	tgggcgccct	1740
cagctccagg	cagcagccaa	cgccggcatc	tgtgccaaac	tcgcttctgt	cccttcatcc	1800
gccagaggcg	gagagagcaa	cggcattgag	agcaagatga	ggaaagttag	ggagctgatg	1860
gcagagcccc	cgcgagggag	gccgagctga	tggcgagacc	cccatgggga	ggcccagctg	1920
atggcagagc	ccctgtgagg	gaggctgcat	acttcgtagt	gataagagag	gaagggggac	1980
ggaaagaagg	caggcgggcg	tgggtgtcctg	ggaagactgt	gagcgctggc	ctcggactct	2040
gcaggttaaa	cacaggcagc	aggggcagga	ggctgtgcta	accaagagga	gaatgtccct	2100
gggtggctgc	ggggagagga	ggccccgcgt	gaatggctct	gccccatcct	gtgggctttt	2160
gtctctgtgg	tcttagagac	ccgccttctt	tcctggatga	agaggggagt	cctgtccaga	2220
cagtaggatg	aagatgaggg	gtctttactc	cccacaagtg	ggctcaagcc	caggaggact	2280
gggggacagg	tagggcggtg	ccgctgcctg	gaggggctgc	tgcttgggaa	acctaagctg	2340
tgagagggaa	ggcagtatga	gggagcagca	gtcagggagc	cgctcatgcc	tggagccacc	2400
cgtcaccctt	ggattatcca	gaagactctt	ggagggagga	ggagcgcggg	gaagcgagct	2460
gtgccctaac	tgccctcttcg	gaggactgcg	gcattcatgc	tctggcctcc	agttgaaaat	2520
agaaaaaggg	atttaaacia	gcttaggtga	acataataca	atggaaagga	ttaaaggagg	2580
ttaaaggata	cttttaaaaa	aatatcatca	tggcagaaaag	accaagggaa	gatgggttag	2640
tcaaagtatg	ttccagggaac	tgctgcccag	aattgggttt	tgtggatgga	ttattctctg	2700
catcttttga	gcaaagacga	gagactggga	gtggatttgg	tctcacgtct	acagcatgga	2760
catcgctttt	ggctcagatt	tgacagagac	ccttgagaga	ggggggactg	cagccgaggt	2820
gtggccgggc	tcctccaggg	cctcctcagc	ccgagttccc	tttgggtgca	gagatccagg	2880
tccttgagcc	tgacggccct	cctgggtgcc	acggcactct	cgtaggtctc	cccttccctg	2940
gcttcagtcg	ctttgcccag	catgggtcca	tggagacccc	agcacagacc	atgctcaggg	3000
ccccccaggt	ggaccgagcc	cgctgtctcc	ttggctggta	gggaggcctg	tctgcatcag	3060
gtggagtcgg	gaggtgcggg	cagaggcccc	agagctgtga	cactggagac	gccgtgtgac	3120
cctcatgctc	cgctggtagg	cttgggagag	tcgcaccgca	tctctgacct	cactttcccc	3180
actcgtgaaa	agggctgggt	ccccctcctc	acaacctcct	tgttccttgt	ggggattaaa	3240
ggcaatcacg	tttgcaagaa	gcgctgcctg	aattgtcggg	cggtgtgctg	gtgggaatgt	3300
cccacggcca	cccctctcca	gcgagaggcc	tggagacctg	ggggggcgct	acaggacggc	3360
acagagacag	gagcctgagc	ttccaggcgc	ggtcgggagc	agggtttgag	gccagcggtg	3420
ggcggtggcc	agggcgccct	aagtggacgc	ccacactgac	ctgtcacctc	cacctgcggg	3480
gctccagatg	ccctgcgcgt	ccccaccctt	gcgcccccca	cacctgccct	gcatgcccc	3540

gccccctgccc	cagatgccct	gcggtgtccct	gccccctgccc	ctgcaccccc	cacctgccct	3600
gcatgcccc	gccccctgccc	cagatgccct	gcggtgtccct	gccccctgccc	ccccgcccc	3660
acacctgtcc	cacatgcccc	gcatgcccc	gccgctgtgc	ccccacgccc	cgccccctgcc	3720
cacccccgtgc	acacccccctg	cccccggtgcc	ccccacacct	gccccctgcgc	ccccactgct	3780
cccacgtccc	caccccccatg	cctgcctgtg	tgtctccccg	caggttcttc	ttcagcactg	3840
tggcctcggc	cacagctggc	atgctctgcc	tgatcgccat	cctgctgtat	gtcctcgctc	3900
agtacctcgt	gaacccccggg	gtgctccgca	cggacccccag	gtatgaaggt	acgtggccgc	3960
cgctctcaag	gggcctcatc	ctcgcctcca	gccgtctttc	cgggtggtag	tatcgggtct	4020
ggggtggtcg	gccccctcttg	tcccaggag	aggccggggc	aggcagcccc	atgcaggctc	4080
tgacctggcc	cgacggcagc	agcccagtg	tcatacagcc	cagcagcccc	cagcgcgcgg	4140
gaggcaggct	cggggagggc	gctggccacg	ctgctctgta	gatgctgcc	ggtcgtgtca	4200
ggcgagagac	agtggggctc	acctctgccc	ctgccctccg	cagtcacccc	tgtagcacct	4260
gtcacaccat	cctgtggggc	catgtagtgt	tgggaggggtg	ggggtgccc	tcctgcagga	4320
gcagcccatg	gggagggaga	gtggaggcag	cgctgagggt	gctgggctgt	aggctgcggg	4380
gcgctgaggc	ccttggccaa	gtgggcccgg	agcctggggc	tcgggaaccg	atgctcacac	4440
tgagccactg	gagagacgtg	gcggtgagga	ctgtgggctc	cagaggcgag	tcacgccta	4500
acccagatcc	cgtgatgcca	gcatcctcgg	gaaatgggcc	tgtggctgtg	acttaatac	4560
tgaggtggga	gggtcgtgct	gggatgtccc	agggggccca	aatccagcca	cgagtgtgct	4620
tgtaagagaa	aggagagaca	cagaggggag	gtggcctcgt	gaggatggag	gcaggggtgg	4680
agtcacacag	ccacagcccc	gggtcgccgg	gagccacagg	agctggcaaa	attgggaaga	4740
cctccctgga	ccctgcggag	gcagcgtgcc	caactgtcct	gcagctggac	gtcagagccc	4800
tgcctgcctc	agactgcaag	agtctgctgg	agaagctgcc	cccacccgcc	accatttgat	4860
gtattttattg	cagcagcgcc	aggaccctga	ccaggaggac	ctggggccaga	gaagcccctc	4920
ggggtgcagg	acaagactgc	cagtctcagc	cccaggcatg	gctgcacccg	cactgcacac	4980
agccccgggtg	gcgagacagg	gaggacttgc	ctgcccttgt	tcagaacat	tcgggagcca	5040
acacgggtgtg	acattttttt	caaggatgag	ctttgccagc	tcacgtgga	agtcocctaaa	5100
gtcctcctct	ccacttcgaa	gcgtgactga	tgcctccagg	gcctcacagc	cgcttctgaa	5160
gcacttcctg	aaagccagct	ccaccctggc	gaggccctga	cctcagcgga	cccaagccca	5220
ggacgatgcc	tgttgcgttc	ttctccccc	gtagcaagtc	accttcccca	gcagcctcca	5280
tgttgtcttg	gctctccctg	tgggggatgc	caggggagag	tgagagagca	gaggtggcca	5340
agatggcatg	tgtgccttc	tctcctggaa	catgctgctt	ccacagggca	gtgccagtgt	5400
ctcctgtgtga	attcattgat	tgtggcctga	gtgaattcct	gggtttgctg	ttccagatga	5460
ttctgcaggg	cttcaaaaacc	agcaaggccc	tgagcaaagc	tgctccttct	tctcatgggc	5520
tgaactcatc	gtgatgtcac	tggctaagg	gggcagcatg	gggtccagcc	cgccccaggc	5580
acatggagct	gcggctcctgt	caggctgagt	gtggtgtttg	ccttctagga	tggccccgag	5640
gccaccagtt	ccagagaggg	tctgtcacc				5669

<210> 5292
 <211> 5339
 <212> DNA
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (3656)
 <223> n equals a,t,g, or c

<400> 5292						
ggatcaacaa	ctgcgtggga	agccggaatt	attggtgagg	ggcacagagg	ggatggccgg	60
cacgggccag	gcttggggga	atttgaagg	gaggggtctg	tgggcagggg	tcctcgtgtt	120
gaaaggggtg	agggctctct	tggggccacg	tcctgtcct	gatgtggtgg	cgcttggtgc	180
ctgcgtgccc	cggcctcctg	tctggctctg	gggctgtggt	gcagccgtcc	ctggacaagc	240
tcacccgcat	agagtaagtc	cctggaggcc	ccccgggggc	acttgccggg	ccacgctggc	300
tgaggcctcc	tgaccacgct	gtcctgggct	gggctgcctt	ctctccaccc	aggctgaggc	360
tcacccagca	caagggtggg	gccacggaag	ggcagtgggc	accagcgca	gatggacgag	420
aggtgtttcc	cctgagcatg	gtggaggctc	acagatgaga	ggtgtttccc	ctgagcacgg	480
tggaggctca	tagacgagag	gtgtttcccc	tgagcacggt	ggagatgcaa	ggaagagaga	540
tgtttccctg	agcacggtgg	aggctcacag	gcgagaggtc	tttcccttga	gcatggtgga	600
ggctcacagg	cgagaggtgt	ttctcctgag	catggtggag	gcacaaggat	gagaggtgtt	660
tccccgtatc	acgggtggagg	ctcacagatg	agaggtcttt	ccccagagcg	tgggtggaggc	720

tgcttgagat	cgcgtgccctg	taaaatggat	atgatgtttt	actgatgtct	gtaatacatt	3300
tgtaaaccttc	caataaaaatt	tgaataaaaag	aaatgtttgcc	attcttctca		3350

```
<210> 5296
<211> 3349
<212> DNA
<213> Homo sapiens
```

<400>	5296					
tattaatatg	acattttgtca	ttgtcactga	ttttttttaa	aaagcaatgc	acatgttgggt	60
tgtggctggt	ttccgcgatgc	tatcttcata	tctaaatgct	tcattaatta	tccgagcctc	120
cggagaatta	actctattac	gtttgtatag	taagtttgta	aactgcttgg	caaactgatt	180
aagaaataat	ttgcaataacc	gtgctactaa	agtggcaggt	ttctggtaga	aattgtgcga	240
gtccaatttg	gagttttaag	ttccttgatt	gatgaaacta	aaaaggcaat	tttggaaaaa	300
gagaggggga	aacagtagatc	acttattctta	gcaaacggtt	gaaaatatgt	ctgtcctctg	360
tggcccaaaa	ttcagtgaaa	gaaattctcc	cagtaaaagt	tgcttcttaa	ctctgttttt	420
ctcagaatac	ctcttacctt	tctcaaagaa	agcttcaacc	accatcatca	gaaagaaggt	480
ggcctaaaaa	ctgacacatg	gccagtgcc	ggaggggtct	ggaggcataa	gtctagatgc	540
ccagagagca	tccaggcact	gaactgctca	gagcttgaga	tgaaatgaca	tacaagcttc	600
agggtaaaac	tgtctactag	caagattacc	tccctcaatt	ctaccattgc	agatttcttc	660
tgaccccaaa	tgcaacctta	cagagaatgc	tgaatgagga	aggccaattc	cttacaatga	720
tggcagaacc	cccaagcgaa	tgccttatg	aggagaagga	catcactgta	tttggaaattc	780
tgcttgctag	tgatagtca	cacatcacat	cccgaatcc	cactcccaat	gcattatttc	840
ctgaggcaag	aacttaaggt	ctcacctaa	ttcctccatc	acaaccatta	actcttattg	900
gacaagctcc	tcctgtgagt	ggggcctgta	ctcacttctc	cttagatcat	aattccatct	960
tcaagagact	gattttccaga	atagtaatct	ttttccagcg	ttctctcttc	tccaatgcc	1020
tggttgttat	ttttccacc	tctcctaata	ttgatcttct	tgtcttttgg	ttagaactgc	1080
aacttcggag	ttgagttcat	ttcctattgc	tgtcgaattc	agtagcaaca	tagctggctt	1140
gttcccagac	ccaggaagta	taagtcattg	acagtttctc	gagtggtctc	gccaatccat	1200
accacccttg	gtactgtgaa	aaggcttctt	ggcagccagg	tggcattgag	gatggtattc	1260
agggcgcttt	ccttctgtca	tatagtttg	ggatctctac	caagtgtgaa	ggtgaatgag	1320
gtaagggaga	tcagaacctat	gcttcttggt	ttttcataca	tccaaggaag	aagtcctggt	1380
gtgggtgtgt	tgacaccttc	tttccacttt	caccttttat	tttttatctc	ttcctttcta	1440
cccccaacca	gtcagcaaaa	tgagcaattt	tgtgtttcta	atacaggatc	tggaagtagt	1500
gcttttcta	cctcatttcc	tgtaggatgt	tcctgcacta	taacaagatt	atgttttctt	1560
ccttctgcag	cagctttctg	cttcttgggt	actactagct	attgttcaat	tcaggtgagg	1620
cctgtgatga	catatatgtg	gcattgtgct	tgcgctccct	gcaagctgag	cagatacaac	1680
caatgcatca	ctgtatactc	ttgctgagaa	tgtggatgca	gcctcacaga	tctttgcaac	1740
actccaacca	gccaggacca	gttgatcaga	actgatctta	ttggtctgat	aaccaatctt	1800
atttgtgaac	tgattcatat	ctgtcttttc	actcttgggt	ctcttgccgt	agaacaaaaa	1860
cagtttagga	agcataatta	cgaacattta	ggaaccaata	tgtataagta	attcggagac	1920
tccaattcac	gtccccctcc	cccatccacg	gctgtggagg	ctcgaggaag	ctgacttctt	1980
aggctaaagg	acaaaaaaat	atctttacct	ccttggccat	tttcatgttc	tctgccaatt	2040
actataggca	gtcttcattt	tgcagaggtg	aggtaagact	tcattcttatt	cttcatgtaa	2100
ttccaccttc	taacaaaaaa	taaataaata	tttaaatctc	aaggagaagt	gttcttttgt	2160
tatttctagc	agaaaacaga	tgtttaagcc	taagaaggaa	gatccgtcca	tgacaaagga	2220
aagtggaaaa	ctgaaccagt	tatctgaata	cttcatgcca	ggacagtgtc	tattagcaac	2280
tgttttgcac	cttcagggtc	ttaaaatggg	ctctgcagac	agcattagca	tatgcaagac	2340
tcagtagcca	agcctccact	gccaatgttt	gaaggcagtt	tcagatgcgc	accttggagg	2400
tacatttctt	taagcacaag	agaagtgaag	atggcctttg	ccttgtctcc	agtggtttgt	2460
ccctctgggt	cctcagcaga	taccagagct	tattcttatg	accatttggg	agtagtcctc	2520
aaagtaaaga	tcaagaaaaa	attggattct	ttttccattt	tctcataata	gtagcctagt	2580
caacacaaga	ctcccataaa	atatgactca	ctattggggg	ccatactatt	ttataagctt	2640
acttctgtct	gacaaaacta	gctttctctc	aggaaatata	aaggagggga	aagtcacata	2700
gtgttaggaa	aacattcctg	tgttttgaat	acgatgaatc	cataggatag	agaaaaatct	2760
gcttgttcta	ttctgagagt	tctctgagat	atcccttcac	tctgcttggc	atttggccat	2820
tgatattcaa	caggctcactg	accaagcttt	tctaaatttt	tcagagagag	ttacttacca	2880
ataaggtctg	ttcttaaac	tacctagtgt	tatttccatat	ctttccataa	agtgtcatga	2940
ttctatcata	gacctgact	taacattgta	aggactatga	gtcctccatt	ttttaattaa	3000
ttttttttta	gcaaatttagg	acttcggcag	gttttctctc	cctaaactca	ttctttcttc	3060

cagtaaggtc	tgttctttaa	cctacctagt	tgattttcat	atctttccat	aaagtgtcat	2940
gattctgtca	tagaccctga	cttaacattg	taaggactat	gagtcctcca	ttttttaatt	3000
aatttttttt	tagcaaatta	ggacttcggc	aggttttcct	ctcctaaact	cattctttcc	3060
tccacaggat	tgctttgtcc	atctcctgct	ttcatttcaa	gtgcataaac	aaaacctcaa	3120
agggcctggg	aaggtgaggc	aggccagagt	ctgtgttctg	tgttgagtgt	caagctattt	3180
gttaagaagg	tctgcaacag	gcctttgggt	tgggctctgc	cagagactgt	tctgaacact	3240
ttgcttgaga	tccgtgccct	gtaaaatgga	tatgatgttt	tactgatgtc	tgtaatacat	3300
ttgtaaaact	ccaataaaaa	ttgaataaaa	gaaatgttgc	cattctttct	agccctccct	3360
cactttccag	atttttaggg	tggctctctg	ctttgagcat	ttcaacaaga	aaaagaaagg	3420
acacagggtat	ggagggtatga	gttttactat	gaaatatata	cctgattggt	taaatcaggg	3480
tttctaagcc	tcagcaatat	tgacgtcttg	tgctagttaa	ttctcgggtg	cagagggctg	3540
tcctgtgcat	tgtaggatgt	ttagcaacat	cgctgacttc	tactcactag	atgccagtag	3600
cagccccag	aaactgtgac	aactaaaaat	gtctcccatc	acaaccatta	ggatggcagt	3660
tattaaaaat	aacaacaaat	gtgggtgagg	atgtggagca	attggaacac	ttgtacactg	3720
ttgggtgggaa	tgtaaaatga	tgtagtgtct	tggaaaacag	tatggcagtt	cctcaaaaaa	3780
aattaaaaat	agaattacta	ccatatgcta	cttctgggct	atacccaaaa	gaattgacag	3840
cagggtctcc	aaagagatac	ttgtacaccc	atattcataa	aagcagcatt	cacaatatcc	3900
aaaaagtggg	agcaacccaa	atgtccactg	atggatgaat	tgtaaacaa	ggtgtggtgt	3960
atacatacaa	tggaatatta	ttcagcctta	aaacgggaag	aaattctgac	acatgctaca	4020
acatggatga	accttgagga	catttttgcta	agtgagataa	gccagtcaca	aaaagacaag	4080
tgtatgattc	cattttatct	aggcacctag	agtcaaattc	atagagacag	aatgtagaag	4140
agtggttggt	tgtcagggac	tgaagggagg	agggaaatgg	gagttactat	ttaatgggta	4200
tagagtttca	ttatggcaag	atgaaaagag	ttctggagac	gggttgcaga	acaatgcaga	4260
tgaacttaat	actactgaac	tgtacactta	aaagtgggta	agatggtaaa	ttttatatta	4320
tgttttattta	accacaatta	aaaatgtctc	cacacattgt	caatgtctcc	ctgttgagaa	4380
ccactggttt	caatgcattg	ccttcttagt	gtctttgttc	cttgagaatt	cttgaaactg	4440
attctctacc	aggccacaca	gttaattttc	agttattagc	aagaattgaa	agcagcagat	4500
gacccaaaaa	tattttgtgt	tgtttttaag	caaataataa	gtggctctgt	tggagaatta	4560
catccatgtc	tgtgttcttg	ttagggcagc	attaacactg	actgggagcc	aggaccaagg	4620
cagcatgtaa	attcaatttc	cccggtgtct	atccacaaca	ttagggactt	gctggatgct	4680
ataatatcat	ctattcatte	attcaacaaa	tatttatcaa	aaggctttct	ctagccagga	4740
accgttctag	gtgcttgga	tacaataatg	tgcaaaaaca	acaaaaatcc	ctaccttaaa	4800
ggagtttaca	aactttactt	tcaactaggc	aagacattcg	gaatagtaag	tagtcttacc	4860
caccctagct	aatcacaagg	acttgggagt	ggcagacaac	aagagtgtgt	tcattgtaag	4920
acattctaa	agcttttgaa	taaaaacttg	aactggaaat	ggcaattgtg	cctgttctgc	4980
ttacagacat	gccatagagc	atggcctgca	ggcaaccatg	gtttttaata	tacagcctcc	5040
ctgtttcccc	tcttcagcca	aaatgattgt	agtcagggtat	agcaccctac	cagcaatctt	5100
ataagcatga	taagctggac	ttatcagatt	cgctctctca	agaatacagg	ctgggcacag	5160
tggttcatgt	ctataatccc	agcacttttg	gaggctgagg	tgggaggatc	acttgaggcc	5220
aggagttcaa	gaccagcctg	agcaacatag	caagacccgc	ccccgcccc	atcgccctcc	5280
tctctatgga	aaaagaagaa	aaacaaaaac	cagtagcttg	cataatgtgt	caaacttgta	5340
gtcccaggta	ctgagcaggc	tgaagcagga	agataacttg	agggcgcaat	gacttatgac	5400
tgtgccactg	cactccagtt	tgggtgacac	agtaagagac	tttgtctcta	ataagattaa	5460
ataagattat	aaaccaagaa	attctgagag	aatgaggcag	ctggcagtg	gagtgggaag	5520
taagagaatg	tatggggagg	aaccaggagg	tggagtccag	cacaggagca	acaaggtaag	5580
aggaaggatg	aggaagcaga	tgcaacaaat	aagcaaaagt	ctaggctgag	agcagatcta	5640
agagcaaaga	caagagatca	gaatggaccc	agaggagctg	gtcctcagga	cttcctcacc	5700
tccaaacaga	tcctagtccc	tgccctggag	gtacccctct	agggttacca	tttgattttg	5760
gtccttcaca	taccctctcc	cactgtgcct	atgtattgtg	acaatacata	cctatgtaac	5820
ctctttgggc	tcaagagttc	cttgcaatcc	caattaaaaa	atatagaagg	tcccatatgc	5880
actaaatgcc	agttgtgcac	cttttatctt	ggccccatgt	tcctttaaca	ttttaaatgt	5940
catctcagcc	acttgctact	tgttgatctt	gggaaatgtc	catatcctct	ttgagcctca	6000
gttcttaatc	tattaaatga	gataataaca	gaagagtcac	tattgggtta	ttgtgtggat	6060
gtactggaat	aatacgtgta	aagctcttag	tgctacctgt	cattataaaa	gctcaggccg	6120
ggcgcggtgg	ctcacgcctg	taatcccagc	actttgggag	gccgaggcgg	gcggatcacg	6180
aggtcaggag	atcgagacca	tcctggctaa	cacggtgaaa	ccccgtctct	aataaaaaata	6240
caaaaaatta	gccggggcgt	gtggcggggc	cctgtagtcc	cagctactcg	ggaggctgag	6300
gcaggagaat	ggcgtgaaac	cgggaggcgg	agcttgcatg	gagccgagat	ggtgccactg	6360
cactccagcc	tgggtgacag					


```

tttgaacttt  gaggactggt  ggtcagaaaa  tggggtcaaa  agtgagtttg  cttaatgaag      900
acattttaacg  gtttgtgctgt  ttataqtaaa  ataaaactcc  c              941

```

```
<210> 5301
<211> 2856
<212> DNA
<213> Homo sapiens
```

<210> 5302

<211> 2680
<212> DNA
<213> Homo sapiens

<400> 5302

caggggccc	gggcaaagca	cccagtaaag	tgactgatgc	ccttccagag	ccagaacctc	60
caggagcgat	ggctgcctca	gaggatgagg	aggaggagga	agaggctctg	gaggccatgc	120
agtcccggct	ggccacactc	cgcagctagg	ggctgcctac	cccgtgggt	gtgcacacac	180
tcctctcaag	agctgccatt	ttatgtgtct	cttgactac	acctctgttg	tgaggactac	240
cattttggag	aagggtctgt	ttgtctcttt	tcattctctg	cccaggtttt	gggatcgcaa	300
agggattgtt	cttataaaag	tggcataaat	aaatgcatca	tttttaggag	tatagacaga	360
tatatcttat	tgtggggagg	ggaaagaaat	ccatctgctc	atgaagcact	tctgaaaata	420
taggtgattg	cctgaatgtc	gaagactcta	cttttgtcta	taaaacacta	tataaatgaa	480
ttttaataaa	tttttgcttt	agcacttggc	cccattgtag	attgccctgt	gcagtaaact	540
ttcaaggtgt	cggctgcccc	agattgcttc	atttgctggg	tgtggaaaga	gttgctatgg	600
ccaggcatat	gggatttggg	agctcagcag	aagtgacttc	tgctctgtgg	ttgctgctcc	660
ccggctttca	cagacatggg	atggcagcca	ttcttttata	tatttaacca	agaggatgct	720
ggggaattgt	gctgcttgct	ctgttggctg	gtggctgcat	tatgtcctgg	gggtgtgcatg	780
tgggtctatt	tagagcttct	gtcccttctc	tcccattgca	agttgcaccc	agatgagaca	840
gctgtagtac	taggtctctt	tcacctctca	ttgcctgtcc	ctgcttcgag	ctggttgtct	900
tgtgcgtggg	acatgggcct	tcctatctgt	gtttctcaca	agtcaggagc	tgaccaggag	960
cacactaagg	tgtgggtcatg	catcataacc	aacattcact	catctgggac	attcttaaga	1020
tacattttata	aatcattttca	gcagtagtac	tttgtatgtg	ttgagagttt	acagagctct	1080
ttgacatacg	cgatcttagt	ctttacaaat	aaggaaaaca	gctcagtttg	ggaagtatca	1140
gagatgggag	tcaaaccag	atcctctggt	ccaagttgta	tgtgcactga	actaatcagg	1200
caggaaaaaa	gcccagccac	tgtctcacag	attgtttttt	gtatattgta	gcaaaatcct	1260
gaaacaatgg	ggctcctcca	gtctcatcat	acaaaatggc	aatcttggct	gggtgcggtg	1320
gttcatgcct	ataatcccag	tgctttacaa	ggctgaggca	ggaggctctc	ttgagaatag	1380
gagttcaaga	ccagcctggg	caacatagca	agatcctgtc	tctccaaaaa	aaaaaaaaaa	1440
aaaaaaaaaa	aatttcatatt	ttgagtcacg	aggaccctcc	tattactctt	gatttcatct	1500
tcagagtgtg	gttaaaaaat	tattttaaat	aattattttt	ttaaatcagt	tgtaggttca	1560
cagcaaaagt	ggacaaaaag	aaattttctc	tatatccctt	gccctcacac	atgcatagcc	1620
tcccaccact	atcagtatcc	cacaccagag	tggtacattt	gttacaatca	ataaacctcc	1680
attgacacat	cattatcacc	caaagtccat	agtttacatg	aagattcact	ctgggtgttg	1740
acattgtatg	ggcttagaca	aatgtatgat	gatattctaca	attatagaat	catacagaat	1800
agtttctactg	ccctaaaact	tctctatgct	tcacctgttc	atccctttct	tccctaatacc	1860
cctggcaacc	acttttaaaa	aaaaattagg	ttcagggggg	acatgtgcag	gtaaactcgt	1920
gacaaggggg	tttggttatac	agattattta	gtgaccagag	tactaagcct	agtacccaat	1980
agttactttt	ctggctcctgt	cccttttccc	accctccacc	ctcaggtagg	ccccagtatg	2040
ttatttccttt	gtgtccatgt	tatttctactc	ccacttgtga	gaacatggaa	tattttggttt	2100
cctgttccta	tgtttagtttg	ttaaggataa	tggcctccag	ccccatccat	gttccctgcaa	2160
aggacatgat	ctttcttttg	caaccacttt	ttactgtcgc	catagttctt	ccttttctag	2220
aatgtcatat	tggaaatcata	tagtatgtag	ccttttcaga	ctggcttctt	tcacttaata	2280
atatgcaatt	aaggttcctc	catgtcattt	catggcttaa	tagtgcattt	atttttagca	2340
ctgaataata	ctccattgtc	tagatgaata	gtttatccat	tcacctattg	aaagacttct	2400
tggtgggtttc	caagtttttg	caattatgaa	taaagctgtt	gtaaacatct	ttgtgcagggt	2460
ttttctatgg	gcatgttttt	aattcatattg	aataaatacc	aagagcttca	gtgctggatc	2520
atatgggttg	tctcgtttga	ctgtcaaaagt	gtaccgtttg	cattcccacc	agcaattaat	2580
gagttcctgt	tgctccacac	cctcaccagc	atttgggtgg	gtaagcgttc	tgggttttgg	2640
ctatgctaata	ggttatgtgg	tggtagctga	ttgattgaca			2680

<210> 5303
<211> 2925
<212> DNA
<213> Homo sapiens

<400> 5303

ttgcttctct	gtcaaagatc	agttgactat	atttgtgtgg	ggctatttct	gggctcccta	60
tttgtttcca	gtgattatgt	ctattttttc	accattacca	ccctatctta	attactgtag	120
ctttatagtg	agtcttaaa	ttgggtaata	tcagtcttct	gaccttttct	tctttcaata	180

<210> 5305
<211> 2758
<212> DNA
<213> Homo sapiens

<400> 5305
 acatggatag atctcttagt ggtcttttcca aaagtacatg tacttgaaat attttcatta 60
 tcatactatt ctttgaaaaa aaagatgctt actgtatact tgttttcaag catcctctaa 120
 aatcaaaggt tttgatcaca atatgcagat ttctcttgat agatacttaa ataggctatt 180
 tctctcctct tcttgggcaa tgccttggtt tctcctctga atatttgcac ttgaaaggat 240
 tgcttcctgt tctgtctcatt gatcaaaggt agggccaatt aaggattcta accctaacc 300
 agcaccacaa agccccctg gagcatcttc cgggtgggca ggaccatgcc atctctgtgg 360
 agaaggtgct ggggagggaa gtccttccag tgccacatgg agtgaggccc tgcccatgct 420
 ggggactttg gggaggaatt tggattcttg gtggccttgc tcagctctca ttgagatctt 480
 ttcttatcag aatgttagtg aatatacttc gcagctcttt gttcagcaat aaggaatatt 540
 ctttcaattc ctgtctcttca agccaattta ctacaccag ttgtctttcc agaagttcat 600
 cccagcggta atatgttggt gtttgttctt ctttggattt cacatctgtt ttctggtaga 660
 agtgagcact gttcacttgt gcagtcgtct tattttcctt ctctctagat gactcagctc 720
 tttgtaaatg ttgtgctcaa cttctagggg ccagttctag actttggaga tgcagtgtct 780
 cccaggtgtg cacggacacc tgggtccgtg aaacaggtgt gatgggcaca ggctgctgcc 840
 cttctgtctg gtcgggggat tcctcttctt caagctgctc agctaaccce gaagagggga 900
 gagagtactc cgggtgttcc cagagccctt ccggttgtgc cgcttcgacc tgacacctgc 960
 tcgatgctga ctttaggcttc ctgccaccaa cagtgcaac agaaagagaa catttcagt 1020
 taaggtctgt tcccagacac atggattagc ttccgtgttc tggatggagt cttgggtgtt 1080
 tgtctgacac cgagggcgtt gttcgtccat caggcgggat tggatggagt cttgggtgtt 1140
 tgccttctca gggacaaaa atgtatcatt gactccttaa cagtgcctt cctcccaagg 1200
 acatatccgt gttcattttt cataggtttt actcatattc ataggtagat tctgttaatg 1260
 tgagttggaa agaaaagacc aatttgtaca ccagtcacac cacaagacag tttatcatat 1320
 aaaatacctc aattttttgt attcctcatt tccacctcac aattgtactg gtgatgaatt 1380
 ttaagggctc gtccttttagc ttataggtga tgtttcacat ctggccagat tcttatacct 1440
 ccattgtata cttgaaaagg ttcagaatta caggaacagc agtgagaatt tggcccacta 1500
 ccacgactca tttgtttcat tcacattcct cactgtcaac aacataatta tattttaaga 1560
 aaatgtaact ttgttacatc aaaatatgtt gtctagtaaa aagttgatat tcagtagaac 1620
 aaggatcatg taaataaaca tctatttcac atgtaccaa aagcatttaa aaagcagaat 1680
 ccaggggcca gagcatgagc caggaggag gatgtttttc ttcttttctc tatttttccc 1740
 taaattgtgc aaacataggt gagtctctta acctttctgt gcctcagttt ttctacctct 1800
 aaaggggtgg gatggttctt caaattgttt ctaaaacacc ggcactttca gcagtgttct 1860
 ggtggcctga gatgagagca ccgtgttcag aagtgcctgg gagtggcaca gtggaaactc 1920
 cgcttgacag gaccatggag tctgctcagg accatgctgt aggacacaca gcctcatgag 1980
 ctgagaaaagc aaaggaagt ctgggtgtaa agtttgcatg attccatgaa gctttagttt 2040
 tccttttttt gttttaaaag aaagggtttt atatgttcta ttgtaaaata tggaaattaa 2100
 acagggactt cagaaaagccg cacagaaaaga tcaccttccg atggtgtgat gtgctcctga 2160
 cattcgcccg aggtctgtat tctgaaaaag atttaattggc ctgtgaaaca cgtggattct 2220
 gttgcactgg atttgtaata aatgacgctg aacttcttgc ttccaagcag ctcaacctcg 2280
 atgctgaact gacaccaggc gaatgtcagg gctcccaaac cactagtgcc aaagggtcat 2340
 gttgaaaagt tcagaatatt tatttgtcag aatataataa ttgccccca ccttagtatt 2400
 tttgcacttt acagaaattt agatactgtt ttctagtggc ttgagcgttt tgccttttca 2460
 aaggataact attattttct tgaaaatgga atataatcat gagaggaaga agatgtaaaa 2520
 aatgtcaaat gttgattggt tgtgtaaaa ttttgcata gacatgtatt ggggagcttc 2580
 caattagcat acatagacac atgtgtcagt ggccaagacc tgcttatatt ttgctttata 2640
 gatgtagtca tagcatgttg ttattgcctc atgtaaaata aaaggctatt aagttttcca 2700
 gtaatatatta ttaatctgta tgtgttttaa aataaaaata cttatttcta gctgaaca 2758

<210> 5306
<211> 476
<212> DNA
<213> Homo sapiens

<400> 5306

agtgtaatga	gaaagttcat	gtgtcacatg	aaaatgatca	tgtttgtgtt	gctacagctt	60
ttgtgggaaa	tttagtttaa	aggcagctct	tgggtgtacct	tagtatattt	taatccacaa	120
ttataccatt	gatactgaga	ggtgataccc	gatgatcttc	tctataatat	tcttagagta	180
aaacaaaatc	tcaaaagtat	taatagctct	tctacccttg	aagggtgactg	gtcctgggac	240
agttagaatc	tttcagggtt	acctctgttc	agcagatact	tcagtaggat	acatagcttt	300
tcttccagtg	aaacaaagtt	catatcatcc	attgtttttc	aagcacgtga	caccagcctc	360
aaagtaaattg	acatgaccag	tgggtgaaca	gtctaatttt	caaatttaat	atagagcata	420
taactttctga	tttgatagta	tttattttta	aaaattatgt	tttcatcatt	catttg	476

<210> 5307

<211> 1820

<212> DNA

<213> Homo sapiens

<400> 5307

tgggcagtg	aatctagcta	gatgaccata	atatgtctgc	ttttcttgac	tttattatta	60
ttacttttta	agggcattgt	tcaatcctcg	attttgtatc	tatggcagca	ggtgaaggtc	120
tctagatgag	cgttcacata	cacgatgaca	aatggttaag	gaattttgag	gctaaaatct	180
ttactgctta	gatgtcatgt	actttatagg	catagcattt	ctagatttaa	taggaaggat	240
ctctgctctg	tatgtgcttt	tatgtgactt	gcaaaggaac	tattccattt	aaatagattt	300
caattaggat	aatgggtttg	agacatttca	caatgggtata	ttttctagac	tcttaagata	360
gaattgtcaa	attatagcaa	atagagttag	aaattatttt	gcaattttct	cagcagattg	420
taattttctc	tgccatacat	gtagtcatgt	taaaaataat	agtgttaagg	taccttttat	480
aaaactgatt	attttccaaa	tagactggta	ccttttggtt	tagaaaaaaa	atgatggaag	540
aagattgtag	ttcaggagag	caagcagaaa	gcagtcattt	ttcagccttt	cattttattg	600
taccttttgt	cacatttttg	aagaaaggcc	caaaattgcc	atatgtatga	aagaatattg	660
gtaattgggt	agagttggaa	tgaagtgag	attttcagag	taacaaggtc	actttcttct	720
gtggcttgta	gaaacagata	tgtgatcaca	acaggtccag	cagccagggt	tggggggagt	780
agagagttca	tgtaatattgt	atcatgctta	aatttccata	tttgaaaaag	caactagaga	840
acaggatttt	gtcaaaaaca	agagaaaaaa	ataatttttt	taaacaggag	gggggaaatgt	900
acgtgtttat	cttacaggat	gttgaaaaat	gtttaaatag	ctgcgataca	gtttgttgag	960
ggggcagggg	acagtgggaa	cagtgactaa	agggttacat	tttgatgtag	aaatgcctag	1020
ttgaagaaaa	aagcttgctt	gggaggaaag	tttctgtgga	gatgtaccct	gcatttggag	1080
tgatgtactg	aagcatcaaa	gactcagcat	taattttgat	ctttcttggg	aagctggaga	1140
aaataatgca	tttctgagaa	aaaatagtaa	cttatgaaat	gtcaaagcct	gctctggaca	1200
atgtcaacat	ccatgagtgc	gaggcaaatt	caagaatcca	aaccctaagt	gaagaccttc	1260
ctgacctgct	gtctagacgt	caggggctgt	ttgagcgggt	aggtccagcg	ggttaggcat	1320
tccaaagata	cgagaggccc	acaccacat	caggattgtg	tgtagattct	caggcttcct	1380
aggatttttt	ttgggaaaag	gtttttgacc	ccaagtggct	cccagcttga	cagaaatctt	1440
tagaggcagc	tcagaaaaac	tttggtttcc	caaaaataat	caaaggctaa	agttctgcca	1500
cccttttaaa	gagtagtgtt	ttggctgggt	gcggtgggtc	acacttgtaa	tcccagcact	1560
ttgggaaacc	gaggcgggcg	gatcacgagg	tcaggagttc	gagaccaacc	tggccaacat	1620
agtgaaccac	cgtctctact	gaaaatacaa	aagtttagctg	agcatgggtg	tgcattgctg	1680
tagtcccagc	tacttgggag	gctgaggcag	gagaatcgct	tgaaccggg	aggtggagggt	1740
tgtagtgagc	cgagatccca	ccactgcact	ccaacctggg	cagcagagtg	agactccatc	1800
tcaaaaaaaaa	aaaaaaaaaa					1820

<210> 5308

<211> 311

<212> DNA

<213> Homo sapiens

<400> 5308

tctgcctttg	gccatttaag	cttcttcctt	tctgaatttc	agcctctagt	gctcaggagg	60
aggtcaggga	tctggctctt	aaagggtgtt	ggagaaagg	ctcctttcca	tattgcttct	120
gaggacttct	tagaccattg	gcagcacacg	tcctcacatg	aagggtggcg	tatgatctgg	180
gagactctgc	ttaagaaacc	ggatctcttt	attgatagag	ccatctcatg	agcaagtaat	240
gcaagctggt	ggtaattaca	gaaaacctac	tgtggaattt	catctaaaat	taatgaagag	300

tcagcactgt g

311

<210> 5309
<211> 1957
<212> DNA
<213> Homo sapiens

<400> 5309
aaaagattca tttattgatt tgtgcttcag gtttaatttg aaaacaaaaa caataggaga 60
attggaggaa aggaatggga ggacagagta catgtgttgg catacctttg cttagctcta 120
gaggataatg atgcagattt agatcaatta tgtagctgtg ctgaaatttc cctcatttga 180
gcacctttaa tgtgaattat tatgtgttct tgctggactt acactgttac atcattgtca 240
acttgcttag tgtgctcaga aataaaaattt tcatagcttt cctctggacc ttgtttttaa 300
gggtaataata ttgatccact tggagacaag aggctggtaa tagaaatttg gtacttggtg 360
acaaaattgc tgaatgtgtg aaataagctt tgaaaaatat atgttatggt taaaatgttg 420
gaagggcctc agaattttca cagcagttat ttgtgtattt tctttctagg tgcattgctat 480
tatgatgcta atcagtctat gtatgtgttt ggaggctgta cccagagcag ctgcaatgct 540
gctttcaatg acctctggag acttgaccta aacagcaaag agtggatccg acctttggct 600
tcaggtaaga gatgaaatgc tgatccttgc ctccctacca ggtgactccc ttggcatgga 660
aactctacct gatcattttt ggtgttggtc tcaaggatgg gttactggga ctcaggtoct 720
taagtttaat gtgccatgta aatgataata gtaatatgct tgtgtaagtc tttgtttttt 780
gttaaattat accttatcat tagtaatggt gccttgccaa aattgctgta ctgctgtgtg 840
aattcatttg catggttttc tcaagtatac tcatacagg gtgatacatc atttggtagg 900
aggttgaagt aagaacagaa acacagagtc gtgagaactg tagttgactg acagaagcta 960
ttgtcctagg gctaaggctc ctgaatatct gttgttgttg ccagctcaga tatttgggga 1020
gtgtatggga cgtgcctctg ctagtacttc ttaacaaccc aggggtgttg gaagattcta 1080
cagtaggtac attcctaccc agtcccacta tgccagaaat ctggcagaaa gaaactagat 1140
tattttctta tttttgacct aacctctcct gggggaaaaa ataaaaacaa tggtttttgc 1200
actcatgagg cagggcaatt tgaggaggca tagattggag gggttggtgt gatggagaaa 1260
tagtgtccac tgagtataaa gtattctgct agattttttg gcaagctttt cccaaaacat 1320
tcatttggct ttttagtatt aggactcagt cttaggacta aggacatttg ggtttccatt 1380
gggcaagttc cttatttatt taggccttgc cttactactt tgattaccag ataggaggca 1440
tcattgtata ttagaaaggg cactggacta agagtggagg gacatgagtt tcatttccctg 1500
gcatagtcac caattctcca tgtaactata aataagttat tgcacttctc tgggagaaat 1560
gtggagtagt actaaatgac tattttttaa tgggctaaaa aggctagttt atgtttccct 1620
ttctataacc gctactgtga atgtctaggc cagggactta aacctgttta tgagaagaag 1680
ctgcattttg ctccctaaa acttaagttc ctgttctttc cacctacatt aggcaaatat 1740
aggaggagcc tactgagtggt ataccatggg tggagctggg ctttgtgtag atgaagttct 1800
ttattaaaaat tattggcatt tggagggtag gaggggtgtg gtccagctctg cagatggcca 1860
caccaggagg aggagctatt atatccctt ctcttccact tcctgtcaca accaataaag 1920
gccgtttgtg ccattcataa aaaacaaaaa caaaaac 1957

<210> 5310
<211> 1957
<212> DNA
<213> Homo sapiens

<400> 5310
aaaagattca tttattgatt tgtgcttcag gtttaatttg aaaacaaaaa caataggaga 60
attggaggaa aggaatggga ggacagagta catgtgttgg catacctttg cttagctcta 120
gaggataatg atgcagattt agatcaatta tgtagctgtg ctgaaatttc cctcatttga 180
gcacctttaa tgtgaattat tatgtgttct tgctggactt acactgttac atcattgtca 240
acttgcttag tgtgctcaga aataaaaattt tcatagcttt cctctggacc ttgtttttaa 300
gggtaataata ttgatccact tggagacaag aggctggtaa tagaaatttg gtacttggtg 360
acaaaattgc tgaatgtgtg aaataagctt tgaaaaatat atgttatggt taaaatgttg 420
gaagggcctc agaattttca cagcagttat ttgtgtattt tctttctagg tgcattgctat 480
tatgatgcta atcagtctat gtatgtgttt ggaggctgta cccagagcag ctgcaatgct 540
gctttcaatg acctctggag acttgaccta aacagcaaag agtggatccg acctttggct 600
tcaggtaaga gatgaaatgc tgatccttgc ctccctacca ggtgactccc ttggcatgga 660

aactctacct	gatcattttt	ggtgttggtc	tcaaggatgg	gttactggga	ctcaggtcct	720
taagtttaat	gtgccatgta	aatgataata	gtaatatgct	tgtgtaagtc	tttgtttttt	780
gttaaattat	actttatcat	tagtaatggg	gccctgccaa	aattgctgta	ctgctgtgtg	840
aattcatttg	catgggtttt	tcaagtatac	tcatacaggt	gtgatacatc	atttggtagg	900
agggttgaagt	aagaacagaa	acacagagtc	gtgagaactg	tagttgactg	acagaagcta	960
ttgtccctagg	gctaagggtc	ctgaatatct	gttgttggtg	ccagctcaga	tatttgggga	1020
gtgtatggga	cgtgcctctg	ctagttactc	ttaacaaccc	aggggtgtgg	gaagattcta	1080
cagtaggtac	attcctaccc	agtcccacta	tgccagaaat	ctggcagaaa	gaaactagat	1140
tattttctta	tttttgacct	aacctctcct	gggggaaaaa	ataaaaacaa	tggtttttgc	1200
actcatgagg	cagggcaatt	tgaggaggca	tagattggag	gggttggtgt	gatggagaaa	1260
tagtgtccac	tgagtataaa	gtattctgct	agattttttg	gcaagctttt	cccaaaacat	1320
tcatttggct	ttttagtatt	aggactcagt	cttaggacta	aggacatttg	ggtttccatt	1380
gggcaagttc	cttattttatt	taggccttgc	cttactactt	tgattaccag	ataggaggca	1440
tcattgtata	ttagaaaggg	cactggacta	agagtgaggg	gacatgagtt	tcatttccctg	1500
gcatagtcac	caattctcca	tgtaactata	aataagttat	tgactttctc	tgggagaaa	1560
gtggagtagt	actaaatgac	tattttttaa	tgggctaata	aggctagtgt	atgtttccct	1620
ttctataacc	gctactgtga	atgtctaggg	cagggtacta	aacctgttta	tgagaagaag	1680
ctgcattttg	cttccctaaa	acttaagtct	ctgttctttc	cacctacatt	aggcaaatat	1740
aggaggagcc	tactgagtgg	ataccatggg	tggagctggg	ctttgtgtag	atgaagttct	1800
ttattaaaa	tattggcatt	tggagggtag	gagggtggtg	gtccagtcctg	cagatggcca	1860
caccaggagg	aggagctatt	atatcccctt	ctcttccact	tcctgtcaca	accaataaag	1920
gccgtttgtg	ccattcataa	aaaacaaaaa	caaaaac			1957

<210> 5311
 <211> 424
 <212> DNA
 <213> Homo sapiens

<400> 5311						
attgagaagt	cttttttgtt	tacttaattt	tattttattt	tattttttacc	tcctgcgtgc	60
atgaaatgga	tggcaaggaa	agcttttgctt	gggcctcttc	ctgaaatcca	agatggcaaa	120
tgcaagactg	taaggaatgt	gatcgctcatt	tccaaaggat	agagaccgca	aggggcagaa	180
cttagcactc	atgcactctt	tctagactct	ggctttgggc	tttgtagttt	ttgggtaaca	240
gcccttctga	tagtcattgc	ctctttttct	taggaatgcc	tgggtgatgtg	tatacaatca	300
tctaatacaa	gaaggctttt	tttagagatc	ctggtgtttt	ttaaatgtta	ccgttctgtt	360
ttctagtcgg	ctccaaccag	catgccttgg	tagctcttgg	atacatattg	ggacttaatg	420
attt						424

<210> 5312
 <211> 364
 <212> DNA
 <213> Homo sapiens

<400> 5312						
aaccatcaag	tttaaagact	gcttttgtggc	taggcgaagt	ggctcacgcc	tataacccca	60
gcacttttagg	aggccaaggc	agaaggatcc	cttgaggcca	ggagtttgag	actcacctgg	120
gcaacatggg	gagaccccca	tctctacaaa	aaataaaaaac	aaaaaattag	ccaggcatgg	180
tggcatgcct	ccatagtccc	agatacttgg	gagggtgaga	caggaggatt	gcttgagccc	240
acagatatata	gcccagacgc	ctaggcgaga	gtgagactgt	gtctcaaaaa	aagaaacaaa	300
gaaagagaaa	gagaggaagg	gaagaaaaga	ggaaggcagg	aaggagggga	gggaagccaa	360
agaa						364

<210> 5313
 <211> 364
 <212> DNA
 <213> Homo sapiens

<400> 5313

<210> 5317
 <211> 280
 <212> DNA
 <213> Homo sapiens

<400> 5317
 atcccagtagc ttcgggaggc tgaggcgggc ggatcatgag atcaggagat cgagaccgtc 60
 ctgggctaaca cagtgaacc cctgtctctac taaaaatata aaaaaattag cggggcatgg 120
 tggcgggtgc ctgtagtccc agctactcag gaggtctagg caggagaatg gcgtgaaccc 180
 gggaggcgga gctttcagtg agccaagatc atgccactgc actccagcct ggggtgacaaa 240
 gcaagactct gtctcaaaaa aaaaaaaaaa gaatatagtt 280

<210> 5318
 <211> 21292
 <212> DNA
 <213> Homo sapiens

<400> 5318
 cccgtgcgga ggcgggtgcgg agcatttctcg ctctgagcgg ctggggcgacc ggcgcgtcgt 60
 gcggggctgc ggcggagcct ccttaaggaa ggtgcaagag gttggcagct tgcattgaag 120
 cacatcgacc ggcgacagca gccaggagtc atgagcgaca gcggcgagca gaactacggc 180
 gagcgggtac gtagagctgc ggtagggggg ggctgtgtgg tcctagctcc ttgcatcttt 240
 ttctaggccc gtcggcctcg ggccaggagg caggggcgtt ttaggctccg aagtctgaag 300
 ccgggagggc aggcaggga gacagcattt aacaaaaaaa agcctttgtg gatagtgcct 360
 tagtgccttt ggctcgtgaag gagggaggcc cccggcgggt ttatgtggct tctgcccag 420
 acggccgttt tcccgttat aagaggggga agatgaaaat ggccgctgcg tccccgcgg 480
 gttgggggag gggagcgata tcttatttct gcgttgcctt cctgcgaagg tccgccgcag 540
 ccattcttgg ctggcgggct gggcgagctg ccagaggcac aaaatggcgg agaagccgcg 600
 cggcaacgcg gacccgaccc gcagcgggcc gcgcttcgta aggcgcgctg gtggggtgca 660
 aggggacaga cgacgttctt ttgggtcttt gggccgggtg ttaggttaac gaaggaccgt 720
 ctttgcctcc acggaaagga cggagtctgg gatgtctttg gggcctctta agatggaaac 780
 taatccaagg ccgactaagt tctgggcccg ttaggtggag gggattgcgt gagggctttg 840
 tgtttggcct aaatgaagcg cttttctctg atgccgaaag ggcttcccag gcaaaaatct 900
 gtatcagtat tctattagga cagaccacaa agtcgttaag atgattttgt ggacatcgca 960
 tttccacggg attgtgaagg agaaattggc gggcaaccat ttacggcgcc gttatttctt 1020
 ttgttttgag gcgttctaat acttagaacc acagcgtgtg ttggctacag ttttctttcc 1080
 cttaagtttc cactcttaa aggtgttcag tgagggttga ttgaattgcg ggaacaagac 1140
 agttctaggg ttaaacagc atacgtagct ggtctgtggg gctctgggta ttggattcgg 1200
 aaagcattga atgatgcgaa catacgaggc ttgctagaat taagaggaat ctgttagaag 1260
 ggtgatagaa aagcaccata gaaattgatt tttgaggctg tgggaataat ttgtgctttt 1320
 ttaaaaaaaaa aaaaactatt gttacctaa tttccccttg ttggtaaaagc taccttaaga 1380
 tctgaatatg atttaccag taaataagac tattaaatgt cttagcaaac ttttgattaa 1440
 gattttatat gattcctcag agtatttttag gaagaaattt tcagtgatga agcgtgagtt 1500
 tcctgcgtaa ttttggagcc caaactgctt aatttggttt gaactaatca agccttgcgt 1560
 ttacatactc ggatgagcat agagttttta gtttttgatg tttttcccga agccgattga 1620
 ctccaatgtc acgagtgttt tagatttttt ttttaagttc tgctttcttg ggtaagaaag 1680
 ttgggattga gtcaaaagt tgttaaaaag tcgtgacttc tgatcattgg cagttgaatc 1740
 tgttataaca gtcattgggtg tttggactgc aaagtaagcg attttaaagt cttttgttat 1800
 taaacagaaa aattcaatta ttgggtacct ttctactctt caaaaatact aaatgactgg 1860
 cttctgacta gagctctcga ttgaatacac gtgaagaatg cttgagaatg gaaaattgcc 1920
 cagagttcat tagtatatt tacgtgagaa gggaaaacat tgaaactagg tccagtttg 1980
 agactcggct caagagaaat ttgaaatttt ctgatgggtt atctttttac tagtaaaagt 2040
 aactgtgtt tttcgcaatc tttgaattgt agaggagggt taacttaatg tgttaaaaaat 2100
 tgagtttttt ttcttacata agagtcttcg ctttctggcc gagatctcta aacttttacg 2160
 ttgtgaaata cttccatatt gttgtgtttg gtgtttgcgt gtttgtgttc caattggaac 2220
 ctttaagggt tggaatacac ctgaatcaaa cacgtgtcta ggcttccaaa gcaagcttgg 2280
 gaaaaccata aagctcaatg gaacagcttg atcttagaca tgctgtgtgt gtaaatgatg 2340
 cttctctgga gccagaaaaa tgagtgttat tcaactccag gcttctgaac tgggtcttaa 2400
 tgtaaatcac taatctcttc aaatcagtg aattctccct tatttatctg tctctaattc 2460
 agacaacccc acccctctgt gccccacctt ttccagtgc tgtaggagtt tgttgttgtg 2520

tccctccct	ttaaggttgg	gtgtgtggga	taaattattc	tcagtttgat	cactcaatag	2580
aatacatttg	ggtgaatata	atgacattta	aagaactggg	gtgtccctca	tccctcgttg	2640
gtctgtggga	tttatttttt	ccccctctc	aaaggtaata	gattaacact	aaaatctgtc	2700
tataggggtc	taattagcag	gcttaacctg	atctggccaa	accactttca	aaagtaagat	2760
ctcgttttca	tctccggatt	caagactctt	ccccaaaat	tgcttgcat	ttgtaaaggg	2820
gttgactagc	accatttctt	tgtaaaaaga	ggcactcctg	gcctttaagt	cacaattaca	2880
agaagttgaa	taaaaagttg	atgaagtgc	gggtaatctt	tagagcccaa	taattggtcac	2940
agcgtatagg	ttgtgtgaga	tttgtatggt	ggtcttgcac	gcagtgtaat	gttctgagcc	3000
tctcaatatt	gtaatgagtt	tctacgagtg	agtctttact	aaaggaatcc	agaaactaag	3060
gagacactga	tgtatggacc	agatgttaaa	gaaaatgttt	tgaccagca	gatactctga	3120
tagaatactg	gctattat	ttgtaaagcc	gatgtgattg	caacataggc	acgtaatctt	3180
tatcattaga	gatgaatagc	agcatctgga	caccaaccca	tcaaactgct	tttcaaattc	3240
tgcagttttt	ctcatcttct	gctgaatctt	gggatgtctt	tttatattcc	ttgggttttag	3300
ctcctaaact	ctaaattcta	attttcaaaa	ctgaaacatc	tctgaatcta	cttctttcta	3360
aagaattgca	gccatctcac	caaatttcct	ttaaaaaagg	attgaattgt	caaataggag	3420
gaaattgttt	tgtattgtga	gtctgggttag	gtttatcagt	ctcttgaaac	ccggttgaaa	3480
tatttttttc	ttgggtttta	acaagaatgc	tttaatatgt	tggatattgt	ctggaactag	3540
aacgtgacat	tttcaagctg	acattacaggt	tgattttata	aggtaagtac	tactggtttt	3600
gccaaaaggt	tgaaaaggaa	ttcaggtggt	gggggaagtg	ttaatgggat	ttgccttaca	3660
tagcgttttt	tctctcttct	tctacaataa	aatccgaacg	taggtggtaa	atattaatgc	3720
tttcatagct	attttgccca	ggacaagggc	agagctacag	ctgtgtatat	ttcttgagcc	3780
ttagcatttt	atgttgatca	gtgtttttac	atatgcgact	gtttttttta	caaggcatgg	3840
tgactgatgt	ttaggaat	taagtgtttt	gacccaggtt	agtattgggg	gtgtgggcta	3900
tgtagaatta	gatattgaaa	tcacttagtc	ttgtttttta	actgcaaacc	aaaagaagtt	3960
cttcactgta	gcaaattaca	gtcttgaaat	tccccaaaa	tctttgcttt	gaattggggt	4020
ttggaggtta	cattgagatt	gatgttatca	acatagattg	ttacctgaca	gtttggataa	4080
ggggccctt	tttctcta	ttttgtgggt	agaaattagg	ttaaaaggta	gtcttctgaa	4140
aagtcaaaag	atattttat	ttgcttttgt	tggggagtac	tgactgtttt	atgaatgtaa	4200
atttaacagt	ctgtgctata	tttacaagag	agtttttata	agcacaggcc	tacaactaat	4260
ttcagatgat	gtttttttcc	agacactatt	ctccagtttt	tgaggattta	cttatccatt	4320
tactcttctg	gtagacagtt	tggctgccag	aaaaaaatat	agtccttatt	atattgatat	4380
gagcattgac	ctttccataa	caggattaat	gaggttttct	ttgcccctgt	ccctcccaat	4440
ttttaaaata	ttgccttgtc	agtcaactta	atgagtttgt	gcatgtttta	tgttaaatgg	4500
attctagtgt	tatccccctag	aaacatttta	acaaaaattg	tgttgatagg	acaagtttct	4560
gtttattttc	aactagggtc	tcttaactaa	atgtacataa	cattagccca	agagttgac	4620
ttctggtttt	ataaagtagc	cacttgaact	tagctgagtt	gaattaaatc	taatatttat	4680
aataatttag	taatggtttt	gttcttagac	tataagagaa	ggaaccaggt	taggaagggg	4740
taatgaagta	acagcaggaa	ggtatccaca	ttgaaaacag	ttgtgatagc	tagagctatg	4800
gcctctatct	ttgtatcttc	tgcactaag	tgccctgtct	gtatcgaagt	tttaggaggc	4860
cctaaggaaa	cctgcttggg	cattctgatt	ccatgattac	atgtgtgctg	ccagaaaaca	4920
tttcccattg	catttttagtg	atggagattt	aaagaaagcc	aattactgta	actcccttaa	4980
ataaaaaacat	atttaaaaat	tttcggatta	aataaacaat	aattgactct	aaaactagac	5040
tggaatttat	ctctttgtta	ggaaagacat	cacagcactt	gccagattaa	cgatggttgt	5100
ctttatgcc	agatagggtat	aaagacttgc	aattttttta	aacaaagcct	tacatttttt	5160
tcaggaggaa	aaaccaggag	aggaagtaat	tgacaataaa	atgaaagatc	atcaaagtga	5220
aatgtaggat	aacaagaaaa	actagcatgt	tttatgtagg	cagtatttta	ttttgttttag	5280
tatgttcaac	agacatttac	agatcaacta	aattcaatct	ttttaattat	ttgaggaggt	5340
gagctgtaat	ttaaatagtg	ccacctttta	aagtagtatt	tctcctttgg	acatccagaa	5400
gacttaatat	tttctaaatt	gagggggaaa	atgtacaaca	aaactctttg	aaaataccag	5460
tgttggattc	aagtttgttc	tgctttccct	catagctact	ggcatattgt	aggtggttga	5520
cttgattttg	tctttttatg	attcatacta	taaaacttca	ctagagcagc	ttttccaggg	5580
ggtgggttac	acttaagctc	caaattgtca	ggttccctga	caccgtcttt	ctgcagagct	5640
ctttaaatac	agtacaaaaa	tgtgtgacgc	taaatacgtt	tctttatcct	atctagacaa	5700
gtcacataac	tgtaaacctc	ttcaaccctg	agcgtttgtc	attgtacaaa	tgaattgtcc	5760
gtgcttttct	ttcatgcact	tatgtattaa	tgtgtcactt	tttgactaga	ggtgtgcttt	5820
tgacacttaa	cctattttct	attgaatata	ataagaagtg	tgaaatgtaa	ctaatagttc	5880
ttaaaatggt	aaatgaacag	taaatgttca	gtggcgcact	tcacattcaa	cttaagcatg	5940
ataagtctat	ttggagtaga	gaaatgagat	taccatatat	tctagaacca	gcagaaaact	6000
atgtagtttt	cagttttttg	agctgcata	tctagtttct	tttttttttt	ttttaatcca	6060
aatcaacaaa	gggatttttt	ttttctagtt	tcagtttttg	cactggattt	tatcctggag	6120
ttttaaaata	ttcttcatcc	tgttcttttt	ctattaaggt	taatgttgaa	gaaggaaaa	6180

ccaaattttc	tccattatgt	tgtaaaccac	aaaactatct	tctaaagtgt	tttgagctgt	9900
aatttagaat	aatcctctac	tgccctttca	agaatgtcca	gaatactctg	aagatgtatc	9960
acacaaggaa	atctcttgtg	attttatctg	aaagcttcac	ctttgattca	tgccatatag	10020
tgacttactg	taatactgct	tccttttgag	tcttgccatt	tctgctctct	ggagtagaaa	10080
ggcttaccag	gctttacttt	gtctaagttt	gataacctaa	aataaagggt	gccttgataa	10140
ttttacctag	ctatcagact	gactaggagt	aggttctgtc	ctttcctcat	ctactgtttt	10200
gggtgccttg	cagaactttt	ccttgggttc	attacttagt	ataccctttt	gttgattatg	10260
tgtcttttag	tcgttgggtga	cctagttatc	ctggttacca	ttcctttgct	atttttcatt	10320
acaaatcccc	ccttaacctg	ccagccaatc	ccagttttgg	ttgggaaagc	tatgagtaca	10380
caatgtttac	ctaaactttg	gcttttgtat	gtagtttctg	tactcttttg	cttcctgggc	10440
cctagggttag	gagctcctga	tttagctgcc	tggttttgat	gtgtacttaa	gtaactaggt	10500
aagttagggt	aattcctggt	tttccataag	tttgccctgg	ctcatctcca	tttagctgga	10560
gaagctgtgg	aggatctctg	acaccctctc	tactcttatt	tgtgtgtagt	tcgctgttct	10620
gttgtagctc	catctgggtg	ctttcagttt	tttagggggc	ctcccaccat	ggtttagatgc	10680
aatagggttt	tacagggttt	agtgtccttc	aagctagcct	ttgctttcca	ctaggtttct	10740
gcttttctct	aggatttgaa	actgagatca	tcacttttat	ctcttatcac	tgaattataa	10800
gtagtaacct	gaaagggtcaa	ggtcttttta	aaaatcaagc	atttttttta	gtaaattata	10860
taaattatat	aggattttgt	tttattgatt	gcaacttgat	tgaaatagggt	ataaagtata	10920
ggtgtcatag	ttaataagggt	tccgcctcac	cctagtcttt	atggagtaac	attctgaaac	10980
acagtccttg	gacagttccc	ttaaactgct	gactttggca	cccccttctg	aaggaggtgg	11040
ggtcaaataa	ctcttatccc	tgctccaaaa	agggtgaaga	aaggacaagt	taattgactt	11100
atgtcatattg	gagcaatgaa	actattaaca	ccaggtatat	tcagttcctg	cccttaccta	11160
tattttctta	tcttggaagg	ggattgctgt	ccctcaccat	ttatctcaca	gcagcttatt	11220
tgtttttaaa	gttgcccaga	aagtgtgcaa	attaaacttt	taacatctac	gtgtaggaat	11280
cccgcttctgc	ttccagaagt	ggaagtgtct	acggtagcgg	gaaatctgca	aggcataccc	11340
ctgcaaggtc	tcgctccaag	gaagattcca	ggcgttccag	atcaaagtcc	aggtcccgat	11400
ctgaatctag	gtaagaaaga	ctgtcttgag	atttctctgt	tactcttagc	tctgaaattg	11460
gtgcgtgttt	tgtaaaccag	gaaggtagag	agggttagat	tatttggttg	cctattaaat	11520
attggtacta	gaagtgaact	taagttctgg	gaggcaagac	taaaagcggg	taagagcctg	11580
ggcttttgga	gtcagggttt	tctatttttg	ctggtttggg	cagattaacc	tttcagcttt	11640
agcttcttta	taaaaggcaa	attagtaata	cagtaccagt	tcttcagggt	tgttgtgagg	11700
atttactaaa	tgtaagtaaa	ctgcttacta	gtatggcaaa	tatactgcag	aacattggct	11760
ttcagtaatt	agaattcttg	ataaataagt	atatatatgg	tgcgcttttt	tttttttaat	11820
gttggtcaaa	agtaggctat	atatacatcc	tggtttgctc	ggggcgatac	catttatgcc	11880
tgtggtcagg	cataattaac	agcacccttc	ttcttaaatg	tgtgtcctcg	tttcgatgac	11940
aatttagagt	cactctagtt	agtcaagagc	cactcaattt	tttgtttttt	taactgctgg	12000
ggaatactcc	ttgtgatttt	gttactgtat	taaattaatg	gtgggcataa	tgggagacag	12060
aaaagtagag	aatggtcttc	tgagggggaa	agatgggcac	aagccaagct	agtaaaatgc	12120
tgcgtgcctt	gatttgtaaa	agataagtaa	tatgtcttta	attggaagaa	atactggagg	12180
agagcttgtg	gttttttagaa	cgcttcctag	caaagttgaa	atgactaaat	aattagagaa	12240
gaaaagtatt	gatactacta	aattggtaac	catgttagca	tattcctgga	ttgttccttc	12300
ttttggagtt	taactttaga	acagagtaat	aaagaagaca	atatttgttt	tcagtcataa	12360
ccttaggagg	tctttgtctt	gcaggtctag	atccagaaga	agctcccga	ggcattatac	12420
ccggtcacgg	tctcgctccc	gtcccatag	acgatcacgt	agcaggtctt	acagtcgaga	12480
ttatcgtaga	cggcacagcc	acagccattc	tcccatgtct	actcgcaggc	gtcatgttgg	12540
gaatcgggta	agatgaaaaa	ctggttttga	agcagtcac	tgcctaaatt	tactttttct	12600
taaagttaga	gctgattttg	acaatagagc	tttagcagtt	gggtgcgtgag	tgaaatcttc	12660
agaggctttt	ttagtgtttt	gagagagctc	tttaagttaa	tcttccatga	cggggctctgc	12720
atttgggctg	cctgtcaatt	aagcataata	ctgacacaat	ggtgtaactc	cttagcccat	12780
caaaaaaaaa	aacttccgac	tgcattacta	tactgtagta	tagtattagt	acattagttc	12840
aaaatatagt	tctatgctaa	cattaactct	ttccaggctg	cataaaccta	gttagatgct	12900
ctcctgactt	tcccatttaa	tttgaagcta	atttcttttg	gggtgttgta	aggcattttt	12960
tacatttcat	gaaaggcttc	aaatgagatg	atattttattg	tgatttctact	gtataatcca	13020
agtggtttag	gaggagggtg	caggggggga	cttaatgttt	ttagagtaga	gtagaatttt	13080
tccttagtaa	attgttagtt	tatgaaataa	atggaatctt	taggtaaatt	catcacagca	13140
tctggaatgt	tagcaacata	tggctcactc	tttattcttt	cctcttgtea	tctttttttg	13200
agacagggcc	tcactctgtc	gcccagctctg	gagtgcagtg	gtgcaatctc	agcttactgc	13260
agcttctacc	ttgcaggctt	aagcgatccg	cccacctcag	cctcctgagt	agctaggact	13320
agaggcatgc	caccacaccc	agtaatttgt	tatatttttg	tagagacatg	gggtctcact	13380
gtgttgccca	ggctagtctc	aaaactcctg	agcttcaagc	agtcaccag	ccttggcctc	13440
ccagagtgtt	tggattacaa	gcatgagcca	ctgcgcctgg	ccaactcttg	tttcttacga	13500

ctctgtaact	ctgtactgct	agtattagaa	ctaaaaatct	taaaatacag	ccagtgcctta	20880
atgcttatat	caatgtggat	ttgtcggcct	ttatgtaatc	tgtaatatgt	atagcaggaa	20940
atacgaagag	ttacacagtg	tatgccttaa	aaggctgttt	cttaaagggtg	ttacaagggg	21000
ataatggtat	ttcaactagt	tatcagcaag	tgacaataca	ttccaccaca	aatacactct	21060
tggtcttcta	gcttttagac	tatatgaaaa	aaccgggtgc	ttcaaagtac	atgataaggg	21120
aacactatac	ctgtcatgga	tgaactgaag	actttgcctg	ttcatttttt	aaatattatt	21180
ttcaggtcct	ttgcttacca	aaggaggccc	aatttcactc	aaatgttttg	agaactgtgt	21240
ttaaataaac	gcaaatgaaa	agaaaaatgt	tggtgcagct	gttcacaaag	aa	21292

<210> 5319
 <211> 627
 <212> DNA
 <213> Homo sapiens

<400> 5319						
agtaaataac	tagactgcgg	gtactttaat	acatgttctt	attattttgc	atttaagtaa	60
ttttcatgac	caattgtagg	gatgttgcta	cagggtgggtt	atthttgttgc	cttgctaacc	120
tttatcgcat	ctaggtatta	gtatgtttca	ggtagcttgg	gaagaacttt	acataatac	180
tttagcaatg	aaatgatgta	gagtaactta	ccttagttca	aatagctgtt	taagtggcaa	240
tgccacgata	tgaattgaac	ctaggtgatc	ttagtccaca	gttctcttga	tcatgatgtc	300
tcaaactctg	gtacctgggt	gatggaaaa	accagtaatg	gagcataggc	agtattggca	360
ggtcttaatt	tgtaaaactt	actgtccagg	gtgttttcag	tgthttgcaa	cttgtggtaa	420
attaatatgc	ttagagaact	acccttaggt	ttgtttctga	taagcatgtg	gaaacaactt	480
agtatatgcc	tgatgggtta	tttcaaattg	ttctcaatga	gttttgaaac	aagaatttgt	540
agtatttata	tataaagttg	agtttttagg	tgtggtccca	gaggggggtg	tgttatggat	600
ggatacatta	aaggctgaga	aacctgg				627

<210> 5320
 <211> 304
 <212> DNA
 <213> Homo sapiens

<400> 5320						
cctttttttt	tttttttttt	tttttttgag	acggaatctc	gctctattgc	ccaggctgga	60
gtgcagtggc	gcgatctcgg	ctcactgcaa	gctccgcctc	ctgggttcac	gccattctcc	120
tgcctcagcc	tcccaagtag	ctgggactac	aggcgccgcg	caccgcgcct	ggctaatttt	180
tttgatattt	tagtagagac	ggagtttcac	tgggttagcc	agaatgggtt	cgatctcctg	240
acctcgtgat	ccacctgtct	cggcctccca	aagtgcctag	attacagcgt	gagccagcgc	300
gcc						304

<210> 5321
 <211> 1452
 <212> DNA
 <213> Homo sapiens

<400> 5321						
caaaaaatga	tctctgattc	atcagcatga	atttccaagt	ttgggggtaca	gggcaatgca	60
ctttctctag	tttatttata	ttattgtttt	taaaaatttg	caatacttac	caaagataaa	120
ggatttggtta	gaaacagctt	ttggaagagg	agcagtgata	taggtttatt	ttactaatga	180
taatagtaag	taaattataa	agaaccttta	atgttttctg	agaaagtata	gcctattctt	240
ggagtttata	atcattttaag	tggttctgga	caaaacttac	caaattcttt	actgttatta	300
ctaaaaagaa	tgtaacaat	tttaagaaaa	caaaaaaatt	atthttttaag	aattttgttt	360
atcggttgat	atactcattg	ccaaaccaga	ttaaagtaat	attccaattg	gattggcttc	420
ttctaagctc	tacttctaag	gaaattgttt	ggattgattt	gctgtctgtg	ctttgagaat	480
gacttttttc	ccctcctcct	ttttttttaa	gcaaactttg	cgtaacttat	tgagcaaggt	540
ttccctttcc	ttttctgccg	aacttaaaaa	actaaatcaa	cagtatgaaa	aattattttca	600
taaatggatg	ctgcaattac	agtaagtatt	atcattacaa	acccttgtaa	aataaagaat	660
aatattttaca	tgaatcttta	tgtaaaagta	agttaacatt	tttcttttta	cagtgaagttt	720

cagatatttta	gtcatatata	aaaataaatg	taaaaataga	cattatgact	cagatataga	780
aatgtcactt	tattgtatga	ctcttcccag	aaattctaca	gtttttaaga	aatttgtgtt	840
tatcagactt	gacagccatt	gataagataa	atagcatttc	ttagaattat	gttattgggt	900
taaaaaactt	gaatattttcc	tttgtcaaga	ttaataaata	taacaattag	aaaaaaaaat	960
tataaagttt	tccacagcat	agttctttaa	atgaaaggat	aatattttact	ttaattcttat	1020
gtatgtgtac	tacagacttt	cagaatttta	tgaacagatt	tggtctataa	gcattatttt	1080
actattttta	cattattttcc	tagaatattt	tttctactgt	attatttttca	cacacctcag	1140
attaaatttt	aaattttccat	taaaacacct	agaagaatga	ttgaaatcaa	aacataatac	1200
tttcttttta	tgataattac	ttttatcctt	gcagttaaaa	agacttgaac	ataaggaagt	1260
gcttaaaatg	tacactaatg	tgaatataca	tgcacactca	cagttacatt	gtcactgagg	1320
taaataagaa	ggtagagcca	tggaccaggc	acttggcctc	ccataatccc	agtgtcttgg	1380
gaggccaagg	caggaggatt	gcttgagccc	aggggtttga	gagactctgt	cttaaaaaaa	1440
aaaaaaaaaa	aa					1452

<210> 5322
 <211> 126
 <212> DNA
 <213> Homo sapiens

<400> 5322						
gcctgtaatc	ccagctactc	aggaggctga	ggcaggagaa	ttgcttgaac	ccaggaggca	60
gaagttgcag	tgagccaaga	ttgcaccact	gcactccagc	ctgggcgaca	gagtaagtct	120
ccatct						126

<210> 5323
 <211> 87
 <212> DNA
 <213> Homo sapiens

<400> 5323						
ctcacacctg	taataaccagc	actttgggag	gccaaggcgg	gaggatcacg	aggtcaggag	60
tttgagagcg	gcctgcccac	catggtg				87

<210> 5324
 <211> 1664
 <212> DNA
 <213> Homo sapiens

<400> 5324						
cccagccctc	atcctgagcc	ctgctgtgtg	cactgtgtct	gatggagagg	cagcctctct	60
ggatggcagc	tctctccata	ttccaaaggc	attcttctcc	tggtctcctt	ccctcttttt	120
aaattaaatg	ggaatgccac	tgacgtgatg	tcgtttgcac	tgcaggatga	cagaactggt	180
gtgtgaatac	cattgtattt	gccaaatggt	ccactcgtca	tttcagaaca	aacaaatgga	240
tggtgtctgt	aagtcggcaa	acactgggtga	catttagcct	tgtttatggt	cctttccttt	300
tgctgcatat	ttttggctcc	aaaagctact	ggctgaatca	acagggcctc	tgaatcagga	360
gagaagtctg	gtagcattaa	ttttagttgc	tatgtccata	ttctcttcag	actgcatgaa	420
tcctactgct	caggaccaag	tctaggtgag	aggagagggc	aatcaacctc	tttggtttcg	480
gatgttgtgt	gcaaagccca	gggttcaaat	aagcagtaat	tatctcctat	tacttagtgc	540
tgatcaacag	cacctctacg	tctaattgcc	aacctgccct	aatcatgttg	actattcttg	600
ctttagccag	agacagaagg	accaaatttt	ataaataaca	ctttattgtc	attattccat	660
taaacgatta	ggggatgtgg	ccctgccctt	gctttcaaat	gcctctagcc	ctgatggttt	720
ctggattatt	taataaatct	gcacattttc	ttgcaggtaa	gtgacactcc	ctgtcctagt	780
cggtctatct	ggacttgccc	ttgtctgttc	gtggctcctc	gtggttatct	gcagcttggt	840
aatcgtgtaa	agtcaagaga	agaatgtata	cacatattgt	tgttgaataa	ttactattgg	900
cataggtatg	tgtatacaca	cgggtgcacca	atctacagta	tatatagcag	agaatcagag	960
gctaaaaata	ttaccccata	tgttccagta	ttagtcatgg	attgcaaagg	cttagtaact	1020
tgagcaggag	agaaaactcc	ctcaaagtca	taaatcctga	gtgacaactg	ctgctggatg	1080
acagatccct	tcacctgtgg	acaacctggc	tgggggtggg	gggctgttcc	accagctcac	1140

ctgagcatgt	agaggtgggt	cctgcagtgg	tctcgtgggt	attactgctt	gtgtctgatt	1200
gtcctgtatt	ttgtaacact	ttagaagaat	acagaaaagt	gcagtaattc	tctttctcca	1260
tagtatttaa	gcagaaatat	tgctagttta	atattgtgtc	aggctcgtct	attaaccagg	1320
agcagatgac	agtaaaat	cagtgaatag	caccttgaca	tctacaactt	aaaaatgggtg	1380
attgaagcaa	aatatgtaaa	cttgtagcgg	gtgatcgtgt	gctttggaac	agagtattgt	1440
tgaagtaatt	agaagatata	ttaaggtgtt	cctggtaatg	aaggcatgta	agttataata	1500
attgtagctt	tctgaataag	tgtcaaacta	tatctttaag	tgtgctgtat	gctgagttac	1560
aagttaggtc	atztatgaat	ggaatgtaaa	ataatactaa	aaatgcttca	ataacttata	1620
ttggtattgc	taataaaaaa	aaaaagctgt	gaaacattag	tgca		1664

<210> 5325
 <211> 413
 <212> DNA
 <213> Homo sapiens

<400> 5325						
gcatctcgg	ctcacggcaa	cttccgtctc	ctgggttcaa	gcatctctcc	tgctgtctc	60
ccaagtagct	gggattacag	gtgcacgcca	ccacacctgg	ctaattttgt	attttttagta	120
gagacagggt	ttcatcatgt	tggtcaggct	ggcttgaac	ttctgacctc	aggatgaccc	180
cccacctcag	cctcccaaag	tgctgggatt	ataggcatga	gccaccgcgc	ctggccaata	240
cctacccttt	tacgagctac	tcagtctaaa	gcaacaggca	gcaaatat	tcttaaaggg	300
ccagagaata	aaagtgttgg	ctcacaggcc	atgggggtgtc	tgtggcgacc	acccaactcc	360
gctttggaag	tagcaccaca	gctaccatag	acaataggaa	aatgatggct	gtg	413

<210> 5326
 <211> 1184
 <212> DNA
 <213> Homo sapiens

<400> 5326						
gtggaaactc	aacagagatt	tgtaaagtac	catatgtgtt	ttaccagttg	tccagctgat	60
taaactcttt	tgggtttctt	ttgctgtttt	atgccgaag	ttaaatccat	gctttctttg	120
gttattaata	ctgatgttat	ttaagaaatg	caaaaaggcc	ttactttagt	ttctaagcgg	180
tcttggtatt	acatagcata	aaaattagaa	tggatttaaa	tggtgagtaa	acagcaggag	240
ctggcaaagt	caggcccatc	tgacattgtt	atctaggctg	tggtctttga	gtatggaaga	300
tgacaaggaa	acattaacac	aatagcttaa	tagtttactt	cctgtctttg	gtcaaaatgt	360
tccaaaaact	gaattcttac	ctcaaagtca	ctagcctttg	ggtgatgaat	tcaattgtaa	420
ttactttggg	tttgctcatg	acagtaatgc	agtaacttaa	agttagaaaa	taatttcaac	480
ccaggagcat	cttaaataga	agtcattatt	gtctctatgt	aattcttgtt	ggaatgtttc	540
tttgggcaat	ttaaactgcc	cacacattag	ggcaatgact	ttctgagcat	ttttagcaaa	600
ttaagagttg	ttgtttcttg	ttcttggcat	gttttttgtt	gccttgtgag	agaagatctg	660
tggcaggatg	ctgctcttaa	aaattttcct	ttaaattgac	tcaagctgtt	atttccttct	720
gaatgtctga	tcttataaga	catagtagat	gctattaaga	aagatttgtt	ttactgttgt	780
ttagcactta	aaacatatat	tttgtagtta	tatgtgttag	ctaggggtcaa	acataaaaaac	840
tcaaagtctg	gctgggcgcg	gtggctcacg	ccagtattcc	cagcactttg	ggaggctgag	900
gtgggcagat	cacttgagggt	caggagttca	agaccagccc	ggttaatatg	gtgaaacccc	960
gtctctacta	caaatacaaa	aaaacaatta	gccaggagtgt	gtggcaggta	cctgtaatcc	1020
cagctactcg	ggaggctgag	gcaggagaat	tgcttcaacc	gaggaggcgg	agggtgtagt	1080
gagccgagat	cgcaccattg	cactccagcc	tggtcaacaa	gagcaagact	ctgtctcaaa	1140
ataaatatat	tacaataaaa	aataaaaaact	caagtgtatac	caga		1184

<210> 5327
 <211> 1182
 <212> DNA
 <213> Homo sapiens

<400> 5327						
gtggaaactc	aacagagatt	tgtaaagtac	tatatgtgtt	ttaccagttg	tccagccgat	60

gcaacccctc	tgacaacgat	gaagaagagg	ttgtcacctc	tgagctgggc	aagatgtttgc	540
ttatgctttg	ggctgcaggt	agggacgata	gactgacaga	ctctgaagat	gagtgggact	600
tgtttcatga	taagctggaa	gattttttatg	acttggatct	ataacaacct	tgcattggcgt	660
gtgaactggg	ctgctgaccc	cagacagcag	ctgtccctcg	tggtgggtgtg	gcagtgcctg	720
tgttctctcc	taggcaggcc	tatcaactcc	aagtgtctcg	gtaagaattt	ttaccagggg	780
cctgtcttct	caaccctac	cctttccgcg	aggagtgtgt	tttccctgtt	gaaaaaactt	840
acaaaaataa	atctttaaag	tagttttttg	taacatgaat	ttaaccgtca	gttagttag	900
gtgtgttgcg	ccatctgttt	tcaaccagat	tgtgtttatg	gacttttcac	acactcattt	960
tgaggacccc	aggttcaaaa	gtaaaagcag	tggtcctgct	ttgggggtcca	agaataggag	1020
tgatgggtga	aggaccta	gctggccaat	agccttctgc	tccagacatg	ggacgtggat	1080
ccttgagggt	tctggtgaaa	tctgcacatc	tgtgttttta	tatctgttcc	ctatcctgta	1140
atccctacca	cgtgcacttg	ttctgtgggt	tttgggtctct	tgtttaattg	tacataagt	1200
atactactgg	gtaaccagaa	ccagggtgcaa	atgtgttgag	atctctactg	ttttgcatgt	1260
taggaaaatt	gagaaagaat	acataataaa	gatacagagg	cataacatca	atgcagagtt	1320
ggaagttgac	tcccaagggc	tgacataatg	tgtatgagtg	tggtgtgtgt	aaaagcttct	1380
catccctgca	tagatgcagt	attccttagcc	ttagcagaaa	aaagtgggtt	agtggtttaa	1440
gccttgtaca	gcaggataga	tcttaaaggg	caaagcacta	tattggtagt	tgtcaatata	1500
gcagtgtctg	ctctgtctat	ataaacagag	aaatgggggt	agccatagag	gttaaaacta	1560
cctggttatc	ccatatgtta	acacaaactg	ggctctggat	acactgtgta	tttaattgtt	1620
tatgatctag	cttttccagt	acaggcactt	tctgaaaaac	ctttgtcttc	atttggggca	1680
ttttgttgtc	gagtttttgt	gttttttttt	gtgggtatct	gcctcattcc	accctgagt	1740
tttcacatag	acagatgtga	tacaaaactc	tgttctaagg	tgtctattgt	agtggactaa	1800
tgggttttgc	gtaataagtc	atacttttcc	actgaagggg	agggcttggg	aatccctaag	1860
actagctaaa	attaagttat	ttgaagaatt	ccttgattgg	aaattttacc	tttgtgtttt	1920
gtcgctttgt	ttcctgaaag	taactcgggg	taactcctgg	tttgcatt	tactgctttg	1980
attccttgga	tcccacccat	tctttcactt	tatgaaaata	caaataattg	ttgcagaggt	2040
ctctgtatct	tgcagctgtc	cttttgttaag	aagcactttt	cccaaataaa	acaattcaaa	2100
taatagt						2107

<210> 5331
 <211> 34547
 <212> DNA
 <213> Homo sapiens

<400> 5331						
gagtattctc	gcgagaagtc	caggggtggc	cgtgatggcg	gcggcaggag	caggacctgg	60
ccaggaagcg	ggtgccgggc	ctggcccagg	agcggctcgca	aatgcaacag	gggcagaaga	120
gggggagatg	aagccgggtg	cagcgggagc	agccgctcct	cctggagagg	ggatctctgc	180
tgctccgaca	gttgagccca	gttccgggga	ggctgaaggc	gggtaagagg	tcctgccgcc	240
cgaggaagac	gcgggaggga	ggcccggccc	tcgcgaatcc	cgcggtcct	ggagccctgc	300
cgcccgcccc	ctgcgaacct	aggccccg	gccaatggct	cgccctgcct	ctgcgcgct	360
tggcccgctc	cctctcaagc	atatctcgga	taacgcccc	tccgcacctt	tcacggcgcg	420
tgggagctga	ggctcctgtc	gttatctctg	atccttgcac	cctggcagga	agctggtagc	480
tcacacttta	acgggaggcc	ttcacatatt	ccagaaaaga	aaccactttg	cagtgccaga	540
ctggaagaag	taacggctac	tctgaaaaca	gggtgggaga	gctgcctctc	tttgaacctc	600
tcccaggacc	aactctaacc	caggtagatt	tgactgtaaa	ggccgggttag	gcttccctgt	660
gctccgtggg	tccgcgactg	tctgacatgt	ccaccttctc	agtatcctga	cagtaccttg	720
ggcatccagt	ctgagatcag	gcttagctga	aaaagctgca	ggagtatgaa	gttcggctgt	780
aatttgatca	tcattttttg	gaataggcat	tttgagggtt	gtcttgagaa	ttcttacttg	840
agcgctttca	ttatcttata	gggaggcaaa	cttggctcat	gtaagcgggtg	gcttggagac	900
agaatcatct	aatggaaaag	atacactagt	aagtattttt	agttgtttgc	aagacaaaat	960
agggtttgtt	ttagttattt	cttcttcttc	tttttttttt	ttttttgttg	cgacggagcc	1020
ttgtctgtc	gcccaggctg	gaatgcagt	gcgcgatctc	ggctcactgc	aacctcctcc	1080
ccccgggttc	cagcgattct	cctgcctcag	cctcccagat	atctgggatt	acaggcatct	1140
gccaacacac	ctggcttctt	ttttttgtct	tttagtaga	gacgggggtt	caccatgttg	1200
gccaggctgg	tctcgaactc	ctaacctcag	ttgattctcc	cgctcagcc	tcccagagtg	1260
ttgggattac	aggcgtgagc	caccgcgccc	ggccttggtt	ttacattttt	aagcgaatca	1320
aaaatacatt	caggccaggc	acggtggtc	atgcctgtaa	tcccagcact	ttgggaggct	1380
gagacctcag	gactcattga	gaccagcctg	ggcaacatag	ggagaccccc	gtctcttaaa	1440
aaaataaaat	aaagtaaaat	acattcaagt	caactgattt	gagtctcgaa	ctgctctgac	1500

acaggaaggt	gctgggggata	catcagaggt	gatggatact	caggcggggct	ccgtgggatga	1560
agagaatggc	cgacagttgg	gtgaggtaga	gctgcaatgt	gggatttgta	caaaatgggtt	1620
cacggctgac	acatttggca	tagatacctc	gtgagtactt	ttcatagttt	ttgtgagaat	1680
tgctcggtaa	aataaatctg	aacatgctca	acagttactt	tgtgggcaaa	ataaatgcaa	1740
agtatttcct	atgtctccta	acccttatte	agcaagtagg	atgttgaatc	aggagtgtgt	1800
ttaattccct	tagcatgtta	tctgcttact	gagggcacag	ctctggtaga	tacaatgggtg	1860
ggatttgccc	ctccttttga	gttgacaacc	tggtttgagg	acaaaaaaaa	atgcaattac	1920
aaagtgttat	ataaacaat	ttagaacaat	ataaaccttg	tgttggtgtt	ttggattttt	1980
cagaaaggat	atatgtggat	aaagcctggt	gtccaaaatt	tgagatgacc	catgctcttt	2040
atgcctgaac	catccttttt	ttcctttctc	attgctgctg	actcactcct	ttaggtatat	2100
tgtctactct	cctcagcaaa	cctattttcca	atcatgtacc	tcttctagt	aattaaaatc	2160
atattgtgat	tgagaatgaa	agactttttt	ccttatactg	actgtctgtt	ggaataattg	2220
tactgctcgc	tctctgtaat	gttctttatg	gtttgtatta	tgctaataca	tttataaaag	2280
actatctaaa	cataaggctg	cattatcgtg	aaattaatcc	accttggggtg	agattgtgaa	2340
gaaatacata	tatgtgtgtg	tgtgtgtgtg	tgtgtgtgtg	tgtgtgtata	tgtatatata	2400
tatacatata	tatatgttct	cttggttttt	tcttgagact	gggtctcgct	ctgctgcccc	2460
ggctggagtg	caatggcagg	atcacagctt	tctgcagcct	cgaacttctg	agctcaaggg	2520
atcctcctgc	ctcacccttc	caaagtgttg	ggattactgg	catgagccac	cacaccagc	2580
tttcttttat	aatctgttgt	atactttcta	gttaaaaggt	taaagtgggt	tttagaaatg	2640
ctgatgtctt	aattaacatg	tgacttgtga	tttaggaaag	agtgttttta	aaaagaaaga	2700
aaaatactga	aggatcagga	agaaataatt	gatcttggtg	gcaacatctg	ctgggaaaac	2760
acactagcta	agcaagcctg	gtctcttaga	gaggcctaag	atagggccac	ttttgccaga	2820
aaaatttggt	tggatagaca	gtttaggaaa	ggaagtttac	tagagagata	actgggagga	2880
attcaaggaa	gaatcaaact	acagttcaaa	gttttggtag	ctttggagac	aacagtttgt	2940
aactgaattt	caaaaagtat	atctaaagtc	cagttagatc	ctatcagtgg	tatcaagtta	3000
aaaaaaaaaa	aaggtggggg	gccaggcgca	gtgactcacg	cctgtaatcc	cagcactttg	3060
ggaggccaag	gcaggctgat	cacgaggtca	ggagttcaaa	accagcctga	ccaacatggt	3120
gaaaccccg	caccagaaaa	aaaaatacaa	aaattagttg	ggcacagtgg	tgctgtcctg	3180
tagtcccagc	tactcgggag	gcaggaaaat	cacttgaacc	cgggaagcag	aggttgcacc	3240
ccagcctggg	cgacagttag	actccgtctc	aaaaaaaaaag	gccaggcatg	gtggctcaca	3300
cctgtaatcc	cagcacttta	ggaggccgag	acaggagaat	gacgtgagcc	caggacttcg	3360
agactagctt	aggcaacata	gtgagaccct	gtctctacga	gaaatagaaa	aaaattagct	3420
gggcgtgggt	gttcacatct	gtagtaccag	ctactcagga	gctttagggtg	ggaggattgc	3480
tttaagccctg	cagggttgagg	ctgcagttag	ccatgattgc	tactgcactc	cagcctgggt	3540
aacagagtga	taccctgtct	caaaaaagaa	aagaaaaata	aagcccagtt	agggtgggatg	3600
gattatcttt	tacaactgag	atagagaatg	tgagctagca	gggtataaaa	aaggctgctt	3660
tttacacctg	tttgatttta	aattaaaata	actattttacc	tacctatctt	tagtatgagg	3720
ttttgtcttt	gtaaaataagc	ttatcacaat	agtctgttaa	acagaagagg	ttctacagag	3780
aagtgaaggt	aaggaaaactc	agctgtaaca	tttgtaagaa	tgtttcgtaa	ttccatgagg	3840
gtagcaatag	ttggtaaagt	cagtcttctc	tgaggatatc	ctaagctagt	ttcagagtcc	3900
aagataaacc	tttgttctga	tttcttctct	tctagttaa	gccatttata	ctaaaggctc	3960
tctgtccctc	tgttactttg	ccctttgcaa	gactaaactc	ctgtgctttt	cctgtcactc	4020
tgtgcaatca	ctaccatggt	tctcttctca	aatgcgttgg	ttcctctgtt	gcacccgtct	4080
ctgccatatt	gtctttcccc	tcctggcctc	ttcctctctt	gccttcaaat	aggcaagtct	4140
tctcttgatg	tcagggtgatc	catgcgcctt	ggcctctcaa	agttctggaa	ttagaggctc	4200
gagccactgt	gcctggccta	gttattttaca	tttttaattc	attttttctt	acattctgcc	4260
tgccctttcc	aaccacatta	ttgacacccat	agagatacac	cttagactac	tttgtcctct	4320
tctacagcta	gcctggcata	ttcttttttag	gtactcaaaa	aataaaactta	acgagatacc	4380
agtgagaacc	ttctagatgc	tgaattgtcc	agtataacgg	ataaggctctt	attaactttc	4440
gtgacagaaa	aatccaggta	tttataaaaa	tatgagccct	gttttggttt	tgacaacctt	4500
tttacatttt	aagactattgt	taacatatata	acattttta	ttacctgtca	ctgaggggaa	4560
tggattcatg	tttaacttctc	ataaaagaggc	gtacagcctg	tgacagcatg	cgaacccctg	4620
actccataaa	aaaatacgaa	aattagctgg	gcattggtggc	taatgcctat	agtcccagct	4680
acttgggggg	ctgaagtggg	agaatcaacc	tgagccaggg	aacgtcaagt	ctgcagttag	4740
ctatgattgc	accactgcac	tccagcctga	gtggtagagt	gagagcctgt	ctttaaaaaa	4800
agaaaaagaa	gtgtgtgtgt	tcacaagttc	actaattcgt	ataatttggtc	tcttcggcag	4860
atcctgtcta	cctttctatga	ccaactacag	ttttcattgc	aacgtctgct	atcacagtgg	4920
gaataccctat	ttcctccgga	agcaagcaag	taagaacaaa	ctctggagta	tttgaagatg	4980
attatccact	ggaaaagaaa	agggatctgg	gcgtagcaga	atcaggagac	ctttgcctag	5040
tagctgggat	aaattcagtt	gggggttttag	tctgaataat	tgcaattgcc	catttcaggt	5100
cacatgatga	ctccattttg	ctgctataat	tgttattttc	tggaccactt	atcgagtatt	5160

cccttggtag	tagagatgta	gtactacaga	taactgtttc	ttcctttttg	tttttgatag	5220
acttgaagga	aatgtgcctt	agtgtcttgg	ccaacctgac	atggcagtc	cgaacacagg	5280
atgaacatcc	gaagacaatg	ttctccaaag	ataaggtaga	ggtggaacta	atgtgattgc	5340
agttatatgt	aagagttagg	tggaacttct	aaatatactc	cctaacaagt	actttcttcc	5400
cagtttttat	tgaatatatg	acagtggtat	cagtgattac	cttgttctct	ttttttttca	5460
agatggaatg	cagtgatgcg	atctcagctc	agtgcaccct	ctgcctcctg	ggccccagag	5520
attctcctgc	ctccgcttcc	cgagtagctg	ggattacagg	catgcgccac	cacgcccagc	5580
taattttttg	tatttttagt	agagacagga	tttcaccgtg	ttggccaggc	tcattctcaa	5640
ctgacctcat	gatccactgg	cttcggcctc	ccaaagtgtc	gggattacag	gcgtgagcca	5700
ccgcacctgg	actgttgtgt	tttttttgag	agaggggtct	tgtcaccag	gctggagtgc	5760
agtgggtgtg	tcattggtca	ctgcagcctt	gacctcctgg	gctaaagcaa	tttgccttcc	5820
tcggcctctc	aaagtgtctg	gattacaggt	gtgagccact	gcacgtggcc	tctttttagt	5880
ttattttttc	caaaattatt	ttgaaaagtt	tcaaggtgga	atgtagtgac	accatcacgg	5940
ctcaccgaag	acttgacctc	ctgggctcag	gtgatcctcc	cacctcagcc	tctcaagtag	6000
ctggggactac	aggtgcacac	caccacaccc	agctagtttt	tatggttttt	ttagagacag	6060
ggtttcgcca	cgttgcccag	gcaggtagaa	ctcccgtact	caagtgatcc	gtccgcctca	6120
gcctcccaag	gtgttgggat	tacaggtgtg	agccactgca	cccggcccat	ttcttcttag	6180
atttaacagt	taacattttg	ctacattttg	tttatgtccc	catatatctg	tttttccctt	6240
aagctatatg	aggctacatt	gtgggtacac	tttacccaat	attctgttat	acaaccacag	6300
tgccataatc	ataataaaaa	aatttaacat	tgggtgcagta	ctactaattt	acagttcata	6360
tttgtagttt	ctcaggatta	tttttgtgtt	aataatatcc	tctctatag	cttctttctc	6420
catccaggat	ctggtcagga	tcacccatta	catttagttg	taatgactgt	tttgtctcta	6480
atctattaat	aaaacaattc	ctttattcag	ttgggttttg	ctctattacc	cagcctggag	6540
tgcagtgga	caggcccggc	tcactgcagc	ctcaacctcc	tgtgttcaag	ctattctccc	6600
acctcagcct	cccgattagc	tgggattcca	ggcgcatgct	accacatcca	gctaacttaa	6660
aaaaattttt	tgtggagatg	tgggtctact	agctggtttc	gacctcctgg	gttcaagtga	6720
tctcctgct	ttggccttcc	aaacgtctgg	gaatacaggc	ataaaccac	acaccagcc	6780
cctttattta	tttattttat	tatttattta	tttaatgaat	taaaattttt	taagtgtcta	6840
ggcagttgtt	tggcatgata	ttcctcaatt	tgcatttgac	tttcttcatg	attatgttca	6900
ggttaaactt	ttttttttcc	gctttaatag	ggacaggtct	cactatgttg	cccaagctga	6960
tcttacactc	ctaggctcaa	gcaatctacc	agccttggcc	tccaaggtg	ctgagattac	7020
agttgtgagc	cactgtgcct	ggccatgtgt	taaacatctt	tggcaagaat	attacataag	7080
tattgtgtgt	tttttagact	gtcacatcag	gaggtatata	agatattgct	ttgtttttat	7140
attagtgtgc	ctaaatttga	ctagtgtgtt	aaggaggtag	cattttttatc	tttgtgtcaa	7200
gtaatcctta	agccatacat	ggagattatg	tgagtacttt	attttcctac	tcctttcaac	7260
cagtgatttt	tagcccccac	tgattatcca	accctgaatc	agttgttaga	gtagtagttg	7320
taaatcagaa	tacattcttt	ggttgcaagt	cttctgtaaa	taactttccc	tcattctttt	7380
tcttcccttt	taaatatcac	tgtggattat	tttttaaaaa	tcagtgtgtt	atagtccatt	7440
gttggaattt	tttttttttt	ttaattgaga	tggagtctgg	ctctgtcacc	caggctaaaa	7500
tgtagtgggtg	cgatgtctcg	gctcactgca	acttctgcct	cctgggttca	agcaattatc	7560
ctgcctcagc	ctcctgagta	gctgggacta	ctggcgcatg	ccaccatgcc	tggctgattt	7620
ttgtattttt	tggtagagac	aggttttcac	catgttggcc	aggctgggtc	caaacttctg	7680
acctcaagtg	atccacccac	ctcagcctcc	caaagtgtcg	ggattacaag	cgtgagccac	7740
cacgcccagc	tcttgttgga	ttttttcatt	tctgaccttc	aggttgtccc	agattcaacc	7800
attgtagccc	tatcagactg	actcctgaaa	ctctttgata	ctccccatc	cgtttttgaa	7860
ctcttcctta	ctttctggaa	caacaaaata	ttccaggctt	tctttgtact	ttccctgggt	7920
cctttcagta	aagatttagt	tgtcatggag	ctaactctgg	tgggtgggtg	tttgaagatt	7980
atctaaatag	gaggccagaa	gatgaaggtc	aaaagtcgtt	tcagtcatgc	aagcaggagt	8040
tgggtgagagc	cacagtcaca	gcagtgggga	tgggaaggag	tcctgactga	agtgcatttt	8100
ctgaaaatttt	aaaattttat	tgggtgagcat	ttaggtgtaa	aaattgtgag	agaagagtca	8160
aggacaactc	ttaattgtgtc	tagcttattc	tgggtgatga	ctggttctaa	ggttatcagga	8220
gcaagaatag	aaatccataa	agcagattta	tgaggtaata	taccaagttc	catttttagtc	8280
acaagaagtt	tgagggtccct	ttaggatgtc	cagatagaga	tgtctcagct	ggtagaaata	8340
ggagtccaag	agagaataat	ttgggagtca	tcttccaatt	gacagccaag	ggactgtgac	8400
agagcttttc	tctccaattg	gagtgtgaagc	cctacatggc	taaggtttgt	ttatacttgt	8460
ggaaatcccc	ataatctgtg	tattgtgtgt	atgcaatgaa	atattcagag	attaaaagac	8520
aaacatgtaa	accttgtata	acaccgtggg	gggaaaaact	aacatggatt	tttctcttga	8580
ttctaacaag	atcttcgaaa	aatgctgttt	tctttctttg	tcagcatatc	tttgattgca	8640
gcagtaaatg	tcttaattta	ttttgaaaaa	taggatatta	taccatttat	tgataaatac	8700
tgggagtgtg	tgacaaccag	acagagacct	gggaaaatga	cttggccaaa	taacatttgt	8760
aaaacaatgg	taagtagatt	aaaattgatt	agacttgaca	tttaaaaaac	cattgttttt	8820

aaatcgcgct	attggggcca	ggcacagtgg	ctcacgcctg	taatcccagc	actttgggag	19860
gctgaggcgg	gtggatcacc	tgaggctcgag	agttcaagac	cagcctgacc	atcatgaaga	19920
aaccccttct	ctgctaaaaa	tacaaaattg	cgggcctggg	ggtaatccca	gctactcggg	19980
aggctaagac	aggagaatct	cttcaacctg	ggaggcggag	gttgcagtga	gccgagatcg	20040
cgccattgca	ctccagcctg	ggcgacaaga	gtgaaactcc	atctcaaaaa	aaaaaaaaaat	20100
gcagatattt	tctttttataa	ccaaaataat	tccttgctat	catccaaatt	cagttcataa	20160
tcagattttc	ttgattgtct	taaataccgg	ttcatctcct	gagatattta	ttaattacaa	20220
aaggaaaaat	gtcattttagc	agtggagaaa	cctggcaggc	atcatcttaa	tcaagtgacc	20280
agggtgaaca	tcactatttt	gatagcatat	atgatgcact	gaggggcata	acattacctc	20340
attggagttc	ctgagtaaga	ataacaataa	ccttgacctt	aaaattgagga	aacgccaggc	20400
cgggcatggg	ggctcacacc	tgtaatccca	gcactttggg	aggccaaagt	gggtagataa	20460
ccggagggtca	ggagtttgat	accagcctgg	tcaacatggg	gaaaccccat	ccctacagaa	20520
atagaaaaat	tagccaggca	tgatggcagg	cacctgtaat	cccagccact	tgggaggctg	20580
aggtggggaga	atcgcttgaa	cccgggagcc	agaggttgca	gtgagccgag	gttgccacct	20640
cacactccag	cctggatgac	agagcaagac	tctatctcca	aaaaaaaaaa	acaaaagaaa	20700
acaccagaca	aatgtaactg	agggcacattc	tacaaactga	aatgaccaat	attcttcaaa	20760
gtgtcaagct	tatgaaaggt	tgaggaaatt	tttgagattg	gaagaggcta	aggagacatg	20820
acaactaagt	gaaatgtgga	atctaggatt	agaagcttgg	ccagaaaagg	ggattattact	20880
tgataaattg	gcttaatttt	aagaagggtcc	atggattatt	taatagtatt	attgttaatt	20940
ttctggtttt	gatgattatg	ttaatgatta	tacatgatgt	gaacatttgg	gaaaactgag	21000
tgaagcacac	actaggactc	tactattttt	tgaaagtttg	aaattgttgg	ccgggcgcgg	21060
tggtctcacgc	ctgtaatccc	agcactttgg	gaggccgagg	caggcggatc	acgaggtcag	21120
gagatcaaga	ccatcctggc	taacacgggtg	aaaccctgtc	tctactgaaa	atataaaaaa	21180
ttagccgggg	gtggtggcgg	gcacctgtaa	tcccagctac	ttgggagggt	gaggcaggag	21240
aatggcgtga	acccggggag	cggagcttgc	agtgagcaga	gatcgcgcga	ctgcactcca	21300
gcctgggcaa	aagagcgaga	ctctgtctca	aaaaaaaata	aaaaaagaaa	gaaagtttga	21360
aattgtttta	aaacagttaa	ggccagggtgc	tgtggctcat	tcctgtaatc	ccagaacttt	21420
gggaggccaa	ggagagcaga	ttgcttgagt	tcaggatttg	agaccagcct	gggcaacttg	21480
ttcaaaccct	gtctcttcaa	acaattagct	ggatgtggta	gcacttgtag	taccaactac	21540
ttgggggctg	aggcaggagg	attgtttgag	cccaggaaat	caaggctgta	gtgagtcaag	21600
atgacaccac	tgcattccag	cctgagcaac	agcatgagac	cttatctcaa	ggaaaaaaa	21660
aaaaaaaaacta	gtcaagaggc	tagccacagt	ggctcatacc	tgtaatcctg	gcacttgggc	21720
caacacaaga	agatcgctg	aggccacgag	ttcaaggcta	tggtgagctg	tggttgtgcg	21780
actgagtaag	agagcaagac	cctggctctt	aaaaaaaaaa	aaaaaaaaagt	aaatttttta	21840
aatgaagatt	tattcaaatt	aagtccaaa	ctcatcacca	ttggtttggt	aatatttgagg	21900
gaatatgcaa	tataattaat	atcaatcaga	tgtcttaaag	ttaatcacat	gtaggctggg	21960
ctcagtgact	cagcctgtaa	ttccagcact	ttgggagggtc	agtgcagggtg	gatcacctga	22020
ggtcaggaat	tcgagaccag	cctgaccaat	atggtgaaac	ccgtctgtac	taaaaatacg	22080
aaaattagct	gggcgtgggtg	gtgggcgcct	gtaatcccag	ctactcaggc	tgaggcagga	22140
ggattgcttg	aacttggggag	gcggagggtg	cagtgagcca	agatcgtgcc	actgtactcc	22200
agcctgggct	acagaacaag	actctgtctc	aaaaaaaaaa	aaaaaaaaaag	ataagccagg	22260
tgcgtgggct	catgcctgta	attccaacac	tttgggagac	caaggcgggc	agatcacgag	22320
gtcaggaggt	cgagaccagc	ctgaccaaca	tgttgaaacc	ctgtctctac	taaaaataca	22380
aaaattagct	gggcgtgggtg	gcacgcgcct	ggaatcccag	ctactcggga	ggctgaggca	22440
ggaaaattgc	ttgaaccchg	gaggtggagg	ttgcagtga	ccgagattgc	accactgcc	22500
tccagcctgg	gcgacagagc	gggactccat	ctcaaaaaaa	aaaaagataa	tcacatgtaa	22560
taaaaactaa	gtaacctaac	aactttctct	tttttgttgc	tttctcattc	cttgccagta	22620
tcttatgctg	agatttttaa	actcctcaac	taatatttca	aacacctgac	ctgatatttg	22680
tgatttttaa	attgttttat	tggaactaat	tttttgtggc	aattgtcccc	agaacctca	22740
aataagttgc	aggccttctt	ttaatctctg	tcaccgcagc	tccccagtta	aagatctcag	22800
atgaccggct	gactgtgggt	ggagagaagg	gctacctcat	ggtgagggcc	tctcatggag	22860
tacggaagg	ggcctgggtat	tttgaaatca	ctgtggatga	gatgccacca	gataccgctg	22920
ccagactggg	ttggtcccag	cccctaggta	agctggggcc	ttaatatgga	catcacagca	22980
gatagagagg	atagaccatc	tgggcaaggg	ctaaggcttc	aaggctgttg	ggtttaccag	23040
attgtgggca	tagaattcag	ttcctgaggg	ttgagctggg	ttgctattcc	cgggatattt	23100
ttgtaattct	ttgcttgatga	gaaagttttt	aagcaatttt	acaaaattga	ccaaaaaaca	23160
taaaaagaaa	taggatcttt	ttccttcagc	aaactagatt	tgacttgcaa	tcttctgact	23220
tcctgtgtat	gtttttattg	ggacaggaaa				

cagatttcctg	gctttgaagg	cctgtggcag	ccagtgctta	tcactggctt	gtgtgatctc	23520
ttaggaactg	acccacagct	cacgtttttt	cctaacctgt	tgctatgaca	ttttcagaat	23580
aacagtaaca	atcgggtgcac	aaatagtcac	ccattcattc	ttctacccat	ctatcatttg	23640
tcttttttta	gtgcactaca	gagaaaaatga	cagacatcag	gacactttcc	actaagtagc	23700
ttcaggatac	ataagctaga	attcagcctg	tttaattcat	tcttttgata	caaaatgtat	23760
ataaaatgaa	gtacacaaat	tttaagtgtg	cattcactga	gttttgagtt	tgacctaaac	23820
tgttgaaatg	taggatccac	taggcacatg	ggttcacgcc	tataatccca	acaatttggg	23880
aagccaagct	gggaggactg	cttgagccca	cgagttcaag	accagcctg	gtaacatcac	23940
gagaccccat	ctgtacaaaa	gactaaaaaa	gtgccgatag	tccagcttac	ttgaaaagct	24000
gagatgggag	aatcattcag	cccaggagtt	caagggttact	gtgagctgtg	atcacaccac	24060
tgactcccc	ccaaaaaaga	gatgtggaca	cttaccatca	cctcaggaag	tttcctcatg	24120
ccttttcaca	gttagtcctc	acccccacat	agaggcaacc	actgttttaa	ctttctttcc	24180
caccatactt	taatttgtac	ctcttcttga	acttaaattg	gctcatgcag	tctgtagtct	24240
tttatatctg	gcttttgaga	ctcatccatt	ttgctgcata	tatctgtgca	cccttttcag	24300
tgcagggtag	tactccattg	catgaatgtg	cccagtgctg	tttatgcatt	ttcctactga	24360
cagacacttg	ggcgcgtctca	ggtttggggc	tactattgag	aagatgctat	gaatattctt	24420
gtacagctct	tttgatcat	ttgatagtta	catatttagc	ttataagaa	attttccaaa	24480
ctcttttcct	accatatatg	agggttttag	ttgtcgacat	ttatgattgt	ctgtcaactt	24540
aatttttagcc	atttttgatg	ggtgtgtagt	agtatctcat	tgtgagttaa	attagcattt	24600
ctttgatgac	atactgggca	tttttcatgt	gcttttcggc	cactcatatg	ttttttgtga	24660
agtttctctt	caaataattt	gcctgttaat	attgctattc	tgagacttct	ctgttctttt	24720
tttttttttt	ttttaagttt	aaattttttt	ggtagaaaca	ggtttggtat	tttttgtttt	24780
tttttttttt	tccatgttgc	ccaggctggt	cttgaactac	tgggctcaag	cagttcacct	24840
gcttcagcct	cccaaagtgc	taggattaca	ggcatgagtc	actgcactta	atagtgtctt	24900
ctgaggaacc	aaagtttttag	tttttatgaa	gtctgattta	tcaaattttt	cttttatact	24960
tattttcttc	catgaattta	aaaaaaaaatc	tttggctact	cctgtcatg	aagatatctt	25020
cccatgtttt	cctttgaaaa	catcatggtg	ttagctttta	cacatagggtg	tctgatttac	25080
cttggattaa	tttttttttt	tcttttagatg	gagtcctcgt	ctgttgccca	ggctggagtg	25140
caatggtgca	atcttggctc	actgcaacct	ccgtctcatg	ggttcaagct	gttctccagc	25200
cttagcctcc	cgattagctg	ggattacagg	caccgccac	cacaccagc	taatttttgt	25260
attttttagtg	gagacagggt	ttcaccatgt	tggtcaggct	ggtcttgaac	tccgcctcgc	25320
gcctcccaaa	gtgctgggat	tacaggcatg	agccactgtg	cccgaccaga	tttttatgta	25380
tagtatggaa	attcattttt	tttccatatg	attacacaa	tatcccagca	ccatatgtta	25440
actctttctc	ttctccactg	gattcttttg	atgcctttat	tgaaaaatcag	atgtttgtgt	25500
taaggaaaagg	tttacttcag	agctctgtat	ttcagtgatc	tgtttcttgt	cttttatgca	25560
tgtatcacag	tgtcttggtt	atcatagctt	tagagtaaagt	ctttaaattt	gatagtggaa	25620
atactctgag	tttattctga	taataagcag	cctacagtct	cattttttatt	gattatatca	25680
cactagtgac	ttattgtacc	atcctgcctc	ccggaactct	ttaaatgtat	accacactga	25740
tgcttggttt	tacagaacac	agaggctctg	acttaaaagg	attctgtagg	tgttttttca	25800
atgattcatt	tacattacaa	aaaaaatttt	ttttccttta	attaaaaaaa	aaaacaaatt	25860
ttttgaccag	acactgtggc	tccacgcttg	ggaggccaaa	gcaggcaaat	cacttgaggc	25920
caaagagctg	aggccagcct	gggcaacatg	gcgaaccctt	gtctctacaa	aaaaaataca	25980
aggattctcg	ggatgtgatg	gcacactcct	gtaactctgag	ttactcaaga	ggttgaggca	26040
tgagaatcgc	ttgagcctgg	agggcagagg	ttgcagtgag	ccaagatcat	gccagtgaa	26100
tccagactgg	gcgacagaga	gcaagactgt	ctcaaaaata	aataaataaa	taaataattt	26160
ttagtacat	gtccacacga	cagaatacta	tggatctatt	caaaagccgc	atatatactg	26220
attataaaat	ggtctcta	gtagttgcca	agttaaaaac	tcaagatgca	agaccaaact	26280
tataatatgt	taccatttgt	atggcttttt	gggctttttt	tttttttgta	tgtttatctg	26340
gtgtttttatt	ttgaaacaga	gtctcattct	gtcgccagg	ctggagtgca	gtggtacgca	26400
gtctcgccat	actgcagcct	ctgcctccca	ggttcaagca	attctcctgc	ttcagcctcc	26460
tgagaccca	ggattacagg	cgtgcaccac	cacgccagca	taatttttat	atttttagta	26520
gagacggggt	tgcgccatgt	tggccaggct	gatctcaaat	tctggcctc	gtgatctgcc	26580
tgcttcagcc	tccaaaaatg	ctgggattac	aagcgtgagc	cactgcgctc	ggccacatgt	26640
gtgtgttttta	atttttgaaga	caatatatgc	ctagattctc	tggaggata	ccaggacact	26700
ggaacagtga	ttacttttgg	caggggaaac	tgggtataag	ggacatagaa	agagagactc	26760
tcgtttttata	tgcttgata	tcttggaat	tcttcttttc	taaccatgtt	taatacatat	26820
atatgttaag	aaattgaaat	tttttaaatt	aatgtcatat	atttctctgg	aagtgaatag	26880

tactaaaaaat	acaaaaaagta	accgggtgtg	gtggcacatg	cctgtaatcc	cagctgcctg	27180
ggaggctgag	acaggagaat	cgcttgaacc	tggcaggcca	agattgcagt	gagccaagat	27240
cacaccactg	cattccagcc	tgggtgacag	agtgagactg	tctcaaaaaa	aaaaaaagaa	27300
taggctgggc	gcagtggctc	atgccttgtga	tcccagcact	ttggggaggcc	aaggcgggtg	27360
gatcacctga	ggtcaggagt	ttgagaccag	cctggccaac	atagtgaaac	cctgtctcta	27420
ctaaaaatac	aaaaaattag	ccgggtgtgg	tgtaatccca	gctactcgag	agcctgaggc	27480
aggagaatcg	cttgaacccg	ggaggcggag	gttgcagtga	gaagagatca	caccattgca	27540
ctccagcctg	ggcaacaaga	gtgaaactcc	gtctcaaaaa	aaaaaaaaga	ataagagatt	27600
gtagactcaa	taaagtcctat	ttttttcagt	gagattattg	gaaaagatgt	tgaaatttag	27660
ccacttttat	gggtattttt	attgtgttaa	gcattgtatg	attatgtatt	ttctcacgtt	27720
tcttactaaa	ggcctactga	aaatgtttta	ataaacatgt	gccatctggt	attttttaag	27780
aagtgtgtaa	tagttcaaaa	tctagcaaaa	ctcaactgca	aagattttta	atatctgttg	27840
tagagctcaa	ggggttaaca	ctatttgtgt	gcggatgcgt	ttttttcatg	atgatggagc	27900
tgatgcttta	ttgtgccttt	ttttctttct	tggttttcaa	ggctttgata	aaattcaaga	27960
gttattttgta	ttttgaggaa	aaagactttg	tggataaagc	agagaagagc	ctgaagcaga	28020
ctccccatag	tgaggtgagt	catggccata	agaacattag	aatcataagg	ccttgagcgt	28080
taggacccat	tcctttcat	taaaagttag	gaacacgag	cccaaagggg	aatgaagggg	28140
catctggtag	ccccactggc	cagcggcaag	ctcaccctct	gcttaattgt	tttgcctctt	28200
tatgtagtac	catgcttctg	ctgttagaga	catgatcctg	ttctttcagg	ataactctgt	28260
agagaaaagt	gtataaaaa	agtggcctgc	accaccccat	ctggggaggtg	taccaacacg	28320
ctcattgaga	acgggccatg	atgacgatgg	cggttttgtg	gaatagaaaa	gggggaaagg	28380
tggggaaaag	atagagaaat	cagattgttg	ctgtgtctgt	gtggaaagag	gtagacatgg	28440
gagacttcat	tttgttctgt	actaagaaaa	attcttctgc	cttgggatgc	tgttgatcta	28500
tgaccttacc	cccaaccctg	tgctctctga	aacatgtgct	gtgtccactc	agggttaaat	28560
ggattaaggg	tgggtcaaga	tgtgctttgt	taaacagatg	cttgaaggca	gcatgctcgt	28620
taagagtcgt	caccactccc	taatctcaag	taccacagga	cacaaacact	cggaagggcc	28680
gcagggtcct	ctgcctagga	aaaccagaga	cctttgttca	cttgtttgta	tgtgcacctt	28740
ccctccactg	ttgtcctgtg	accctgccaa	atccccctct	gtgagaaaca	cccaagaatg	28800
atcaatgaaa	aaaaaaaaaa	aatagtggcc	tgttgggaaa	tctacaagag	actgaggaag	28860
caagtccagt	gtctttatct	tttatcagag	gaggtatcaa	gtccaaaggg	agggaacctg	28920
gagtgggaga	gtagaccttg	tgggtgtggc	caggggcact	aggagctgta	acgtctcact	28980
cagtgtcctt	cagaactttc	tctgcctcca	cttccggggg	tgctggaaac	atgtctgccc	29040
aaggtcatag	cacagtcaga	gaaaggctgg	cacatctggg	ccagccacaa	gcaccaaaaa	29100
taaaaaggga	agtgggatgt	agaggagaag	agttaagctg	gaaacatttt	tttcataaaa	29160
atgctaattg	tgtgaggcca	ccaggagcac	taatagaagg	agatggaggt	gaaataaaga	29220
aacgagtttc	agctgttttt	aggaaagaaa	tactaaagag	aaataattat	tagatctaaa	29280
gatgcaataa	ccagaaagcc	ccctcttgtg	ggaagagaag	gcagcctttt	ctgaagaatt	29340
gaagtggtea	agagaggata	ttcagtgtaa	ttctgggaga	gaaaggagga	acatgaggat	29400
tcagagatgt	gacataagag	tcttagagaa	cttcaaagtg	aaaaagcaga	agtgagaact	29460
gactcgggga	aaggaattga	taaataagca	cgcttaaaca	ggtgtggtcc	caaggagtcc	29520
atggaaggcc	agcttacttt	aaaaaaaaaa	aaaaattttg	tagagatgag	gtctcactat	29580
gttgcccaag	ctagtcttca	actcctggcc	tcaagtaatc	ctctctcctc	ggcctcccg	29640
cttactttta	taaatacagt	gcaatgaata	ataaaatata	gaaatgtttg	gtatatgtag	29700
cacaggaatt	cagaaaacaa	agccccggac	tttgagacca	gtctgggcaa	tacagtgaga	29760
tctgtctcta	taaaaaaatt	ttaaaaaatta	gctggatatg	gtgggtgatg	cctgtagtcc	29820
cagctgcttg	ggaggctgat	gtgggaggat	cacttgagcc	aaggaggttg	aggctgcagt	29880
gagccaagat	cacaccactg	cactccagcc	tgagtcacag	agtgagacc	tgtctcaaaa	29940
aagaaaaaaa	agcctgaata	gtgcatatta	acatgctttg	aaaaatcgaa	agtattataa	30000
aaattgaaga	tgttgttatt	acacaagtta	tgcactgttc	ttgggtgagt	gactagcagt	30060
ctggcagcag	cacttctaac	atatttttct	agagagtctt	ttttttgttt	gttctttttt	30120
acagttctga	agtaaaaaca	tggtttttgt	ttcagataat	attttataaa	aatggtgtca	30180
atcaagggtg	ggcttacaaa	gatatttttg	agggggttta	cttcccagcc	atctcactgt	30240
acaagagctg	cacgggtacgt	acatgtttcc	atcccattgag	caaaacttga	gggaagcaga	30300
tgaatggggt	gtgatgacaa	agttactgag	tgctggaacg	aaatccaagc	agcctcagag	30360
tggcatgcgc	atgtgttgtt	accattactg	tttagtccag	aaacagtttg	ggcatcttag	30420
ggagtatttg	ctggatagaa	aaaggctctg	cagtttgtgt	gcgccatact	tttcccttga	30480
gcacgtgggt	tgggtgttacc	gttcagtagg	aaggatataa	atacacatac	acaaatcctc	30540
ctgggatgtc	atgataaccc	acc				

gtcatgggct	caagcagttc	tcccagctca	gcctcccaaa	gtgctgggat	tacagagagg	30840
catgagggtac	cacatctggc	aagttttttt	ttttttttta	aatatgatcc	aaacatgaag	30900
aagggtacta	tcattagggc	ctgttggttt	taaaaatata	taggtagata	ggtagataga	30960
tacagatata	tagaaaagtt	ggggctgggt	gcactggctc	acgcctgtaa	tcccagcact	31020
ttgggaggcc	aaggtgggtg	gatcacttga	ggtcaggggt	tcgagaccag	cctggccaac	31080
atggcgaaac	cccgtctcta	ctgaagatac	aaaaattagc	tgggcttggt	ggcacatgcc	31140
tgtaattcca	gctactcagg	aggctgaggc	aggagaatca	cttgaaccca	ggaggcggag	31200
gttgcaatga	gctgagggtcg	tgccactact	ccagcctggg	tgacaaaacg	agactctgtg	31260
tcaaaaaaaa	aaaaaggaaa	gaaaagaaaa	gaaaacttag	gccagtcgcg	gtggctcatg	31320
cctgtaatcc	cagcactttg	ggaggggtgac	tcaggcagac	catttgaggt	caggagtcca	31380
agaccagcct	ggccaatgtg	gtgagacctc	gttgctacta	aaaatataaa	aattagccag	31440
atgtgatggc	cacgcgccta	taatcccagc	tgtgggggag	gctgacgcag	gagaatcact	31500
tgaacccggg	agatggaggc	tgcaagtgagc	caagattaca	ccactgccct	ccagcctggg	31560
caatagagtg	agactccgtc	tcaaaaaaaa	aaaaaggcg	ggggtggcg	tgggcacagt	31620
ggctcacgcc	tgtaatccca	gcactttggg	gggaggccga	ggtgggcaga	tcacgaggtc	31680
aagagatcga	gaccatcctg	gccaacgtgg	tgaacccca	tctctactaa	aaatacaaaa	31740
attagccggg	catcgccggg	gtgtggcgcc	tcacacctgt	aatcccagca	ctttgggagg	31800
ccgaggcggg	ccgatcatga	ggtcaggaga	tcgagaccat	cctggctaac	acggtgaaac	31860
ctcatctctc	taaaaatata	aaaaaaaaaa	aaaaaagaaa	aaaaaaagct	gggcctggtg	31920
gcgggagcct	gtattctcag	ctactcagga	ggccgaggca	ggagaatggc	gtgaacccag	31980
gaagtggagc	ttgcagtgag	ccgagattgt	gccactgcac	tccaacctgg	gcaacagagc	32040
gagactctgt	ctcaaaaaaga	aataaaaaat	tagccaggct	tgggtggcacg	cgctgtcgt	32100
cccagctact	caggaggctg	aggcaggaga	attgcttgaa	cctgggaggt	ggaggttgca	32160
gtgagccaag	atcatgccac	tgcactccag	cctggtgaca	gagcaagact	ccgtctcaaa	32220
aaagaaagaa	aaagttaatg	catgaagatt	tccatgtact	tttagtctgt	cagtaggcac	32280
cattgaagca	ggtaaaaaaa	aaaaaggaaa	tctttaaaca	gtgtaaacca	aaactatctg	32340
agacagatct	caatcaattt	agaagtttat	tttgccaaag	ttaaggacct	gcctgtaaga	32400
aaaaaacaga	atcacagaaa	cagtctgtgg	tctgtgcctt	tctccaagga	tgaatttgag	32460
ggcttaaaaag	ttttaaaaag	aaaaagggct	ggacggagtg	gctcacggca	gtaatcccaa	32520
cactttggga	ggccaatata	agagaatcag	ttgagcccag	gacctcgaga	ccagcctggg	32580
caacatagca	aaacccccct	tctacaaaaa	aatacaaaaa	attagccagg	cgtgggtggt	32640
catgcctgca	gtcccagcta	cttggggaagc	tgaggtggga	ggatccccct	agcccaggag	32700
gtcaagggtg	cagtgagccg	tgatcgcat	gttgcgctgc	agcctggaca	acagagtcag	32760
agcctgtctc	aaaaaaaata	aaaaggggaa	taaaggggaa	atgcgggctg	gagggggaag	32820
taggagggtg	tggtcatcca	catgttgcaa	gagaaaagga	gcagataggg	gaaagtcaat	32880
tatgtattca	tctcatgccc	ggtaaatcgg	cacttcacat	aaggtaagggt	gaacataaag	32940
tagctgcctg	tggggatatt	taacgtttta	tctgtagggt	tctgcttagc	aacaaaagga	33000
aaggcagttt	cttgcattgac	tcagctttca	gcttaatttt	ttccttttga	cagagcaa	33060
tgggatcctg	aattttttatt	tttctttgac	aacagaaatc	aacacagatc	tcttttagtt	33120
acctaattct	tgatggacat	caggatgttg	accactttta	gtaatatatta	atatatatct	33180
tatttgttcc	atttatcccc	cgagtattgt	agccacattt	aaagtgaaaa	tttctgtgt	33240
caaattaaat	tttccaatat	tttttgcata	ttttttccat	gtctgcttga	attgaattcg	33300
ctccagggtt	ccattcaact	tggacattgc	ttcaagtatc	ctccgaagga	tctcacttac	33360
cgccctgtga	gtaacattac	aaatggctgc	atgtgtcttc	agcatctccg	tggctgctgt	33420
agtcaccgtg	ttctgtttct	cattcctcct	gcagatgagt	gacatgggct	ggggcgccgt	33480
ggtagagcac	accctggctg	acgtcttgta	tcacgtggag	acagaagtgg	atgggaggcg	33540
cagtccecca	tgggaaccct	gaccaggctc	ctcttttctg	tcaaggactt	tctgggaata	33600
atactggggg	ttttgttttt	gtttttgaa	tgtctcaaat	gttctcccaa	agatgctaaa	33660
aacacagcct	ctccttttag	caagttaaaa	ggctgggtag	gactgcggga	gactgcctgc	33720
ctttccacct	tttctcccca	cttccagtga	ctgctcttat	tttgtgtacc	ataagccaac	33780
aaccgctgac	tccaggattg	cataagcccc	ctgtgaaatc	ggtgctgtac	tgcataccct	33840
gccagctgtg	acttgttatc	ctactatat	tctcaaggag	tgaataatat	tgtccgagta	33900
actaacttat	ttaaaagaca	tttcttctg	tgggcattga	ctgtatccca	cctgttttcc	33960
aaggaaatgg	taacctgttt	ctgagaacac	ctgaaatcaa	tggctataca	ttccaaacca	34020
atctaaacgc	tatttccctt	tgggtgtgggt	ttgggtttgt	tcattttgaa	atacactttt	34080
gaacactgag	atccgtaaaa	ctactagatc	tctggaagtg	taattgtgaa	agaaacttgc	34140
ttgcagcttt	aacaaaatga	gaaacttccc	aaataaaact	tgttttgaag	tttatgtgac	34200
actttgcttc	ccttcagatt	gggtgcctct	tgggtgacagt	gttcagaaat	gtaagcagca	34260
cgaggaaggg	agctggcact	gggaggaaga	gccgggtttc	tgagttgtgt	tttgggtgct	34320
ttcctattgc	tcccattctt	gccaatcagc	cacccctttt	cctgtgaaaa	tctgccacct	34380
tgaggagagg	aacaagagtt	taaaagggct	aatgatctcc	ctccgggtct	tcccttgga	34440

aaaacttatt	aatgcgacat	gtagtactga	aattagaaga	ttattgttaa	actcaggaca	300
gctctgtgga	gattcacaaa	gtaatttcac	gaaaacttat	gaggaagttg	ttcagtactg	360
tcactaatta	acgcgcacaa	aaaaaaaaact	tgttgtagt	aattatgggt	gatttcgctg	420
caaaacaaat	tagtatacga	attattattt	tt			452

<400> 5339

ggtttttcata	ctagtctatg	aatgctctga	atgctgcagg	gaaaaagaag	cacaatcagt	60
atttcattat	ttatgaattc	tcaattgaat	tatcctatcc	tgtccacaca	cataatagca	120
ttagcatttc	ttcttatacc	atggttgaaat	acttttaata	caaactctca	atagaagctt	180
aaacataagt	ggttaagtct	tgttgtctag	tctcattcac	ctgcctcaac	atgctttctt	240
tcattctatt	tgcatacaaa	atgttcttat	ttcagttttg	tagacaggat	atgagttagc	300
atactcgtgt	ttgttcagct	gtccatcctg	catcgttact	acaatgcctt	tttctgccat	360
ttaatgggtg	ttgtatcaat	gttcccatat	ctgctgcatt	ttaactccat	aaaaaggaaa	420
tgtgatttcg	tattaatagt	tttggtgatc	aactcaatat	ttttgcacca	atcagcatac	480
ctatatgcat	gtagtagtct	gtacaattgt	tcaacatcaa	aatacttggt	tactttatgt	540
caaaatgtct	ataaaattgc	tggcattgtt	ctccatttca	gtctggtaga	ataagcgaga	600
tagaaaataa	atgtgtaaat	gaa				623

<210> 5340

<211> 1385

<212> DNA

<213> Homo sapiens

<400> 5340

agtagaatat	taaaataaat	gcagaatgcg	ttggctccgc	ttctgggtgtg	tgttctcttc	60
atgttctcaa	cttggccttg	gacttccaaa	gaggtggatt	agtgtctcca	caaagatcca	120
gcagataatc	actgtttctc	cctttaatcc	ttttagagac	aaagtaagaa	taatatacaa	180
tggtaccttg	gccctccagg	ggttattttac	ctggtacctc	agttattact	aaccagctg	240
agaagcagga	aggaaggaga	tgggcctctg	aacagccaaa	acagatgtct	aaagttcaag	300
ctcacctgga	tcattttatc	ttaatttaga	caacaaaatg	aggtttttcc	agctttggca	360
cgttagttag	gatgctatgg	caggttcctt	gagagcagcc	agaagtgata	gcctgggttg	420
agctgagggg	tctgtggaat	actgatactc	aaacacaata	gctcaagaag	ccggatgggc	480
tgggcccaca	ctcgggtttt	acagtgagta	actgctgttc	gtaatgacag	tgctgcatta	540
ttagagagaa	attaattcat	tcttcatata	atcttgcaaa	ggctcttaga	gtatgatata	600
atttaggagg	tattaccacc	agatatgatt	aaactccctc	agtttttctg	ctaagttttg	660
ttttcatata	agtgccagaa	tttaacagtg	gtctctatcc	tacgagggaa	agatagagta	720
gctgccttta	gttagaaata	tacataacca	aaagtgcag	acattaggaa	ttgttcaaaa	780
aggatcttaa	cctggaacag	tgggaatgatt	tcctacaagt	gcattatttg	ccttttgagt	840
aaaataaggt	ccactatcat	ccatctttgc	ggcctgatga	gttttagaat	tcagagcttt	900
tcagattttt	tgaagggaaa	tatgtatgta	tacaaaacca	cacatcacat	aaaagccctg	960
gcagggtcta	aggtaacaca	ctatgataaa	gcattaatat	ttctgcagtg	aaatgtacga	1020
agaactaatt	aggacaaaact	ctgtagttta	tttaaataat	aaaccagtag	actgggtgcg	1080
gtggctcacg	cctgtaatcc	cagcactttg	ggaggccaag	gttggcagat	cacgaggtca	1140
agtgatttag	accatttttg	ctgatacagt	gaaaccctgt	ctctactaaa	aaaaagaaag	1200
aaagaaaaat	acaaaaaaat	agctgggcgt	ggtggcgggc	acctgtagtc	ccagctactc	1260
gggaggctga	ggcagtagaa	tggcgtgaac	ccggaggcgc	gagcttgtag	tgagccgaga	1320
tcatgccact	gcacttcaac	ctgggcgaca	gagcaagact	ccgtctcaaa	aaaaaaaaaa	1380
aaatt						1385

<210> 5341

<211> 1385

<212> DNA

<213> Homo sapiens

<400> 5341

agtagaatat	taaaataaat	gcagaatgcg	ttggctccgc	ttctgggtgtg	tgttctcttc	60
atgttctcaa	cttggccttg	gacttccaaa	gaggtggatt	agtgtctcca	caaagatcca	120
gcagataatc	actgtttctc	cctttaatcc	ttttagagac	aaagtaagaa	taatatacaa	180
tggtaccttg	gccctccagg	ggttattttac	ctggtacctc	agttattact	aaccagctg	240
agaagcagga	aggaaggaga	tgggcctctg	aacagccaaa	acagatgtct	aaagttcaag	300
ctcacctgga	tcattttatc	ttaatttaga	caacaaaatg	aggtttttcc	agctttggca	360
cgttagttag	gatgctatgg	caggttcctt	gagagcagcc	agaagtgata	gcctgggttg	420
agctgagggg	tctgtggaat	actgatactc	aaacacaata	gctcaagaag	ccggatgggc	480

tgggcccaca	cttgggttttc	acagtgagta	actgctgttc	gtaatgacag	tgctgcatta	540
ttagagagaa	attaattcat	tcttcatata	atcttgcaaa	ggctcttaga	gtatgatata	600
athtagagg	tattaccacc	agatatgatt	aaactccctc	agtttttctg	ctaagttttg	660
ttttcatatc	agtgccagaa	tttaacagtg	gtctctatcc	tacgagggaa	agatagagta	720
gctgccttta	gttagaaata	tacataacca	aaagtgcag	acattaggaa	ttgttcaaaa	780
aggatcttaa	cctggaacag	tggaaatgatt	tcctacaagt	gcattatttg	ccttttgagt	840
aaaataaggt	ccactatcat	ccatctttgc	ggcctgatga	gttttagaat	tcagagcttt	900
tcagatTTTT	tgaaggaaa	tatgtatgta	tacaaaacca	cacatcacat	aaaagccctg	960
gcagggtcta	aggtaacaca	ctatgataaa	gcattaatat	ttctgcagtg	aaatgtacga	1020
agaactaatt	aggacaaact	ctgtagtTTA	tttaaataat	aaaccagtag	actgggtgcg	1080
gtggctcacg	cctgtaatcc	cagcactttg	ggaggccaag	gttggcagat	cacgagggtca	1140
agtgattgag	accatttttg	ctgatacagt	gaaaccctgt	ctctactaaa	aaaaaaaaaag	1200
aaagaaaaat	acaaaaaatt	agctggggcgt	ggtggcgggc	acctgtagtc	ccagctactc	1260
gggaggctga	ggcaggagaa	tggcgtgaac	ccgggacgcg	gacgttgtag	tgagccgaga	1320
tcatgccact	gcacttcaac	ctgggcgaca	gagcaagact	ccgtctcaaa	aaaaaaaaaaa	1380
aaaat						1385

<210> 5342
 <211> 1303
 <212> DNA
 <213> Homo sapiens

<400> 5342						
ggtggggcta	gctggaactt	agtttccaac	tgctggaatg	gattatttcc	ttctggctag	60
ggctgatcca	aatgctcttc	catgggaacc	tgctgaattc	tgctctgtgt	tgcttttggc	120
tgtgacaggg	cagcactgag	ttccaatgca	aagtttcaca	attacttcac	tcttctcct	180
ccaaacacac	ggactctctc	agcaccacaa	ggtactgctg	gagaatggcg	gatgagtggg	240
gtagacaact	caagaccatc	ttttctacgc	tcttcagtgc	ctctttcctt	ggtaggatgt	300
taaaactaag	tactgtgate	actcacctga	tttttggttc	ttatgaaggt	gttttcttgt	360
gtggatagtt	gttcaatttt	ggtgttccctg	cagtagagac	aatcaatgga	gggttcttgt	420
caactctctt	gggccacctt	ctccaatcct	gttctactta	atgtatcttg	gcaaactttc	480
catatcagta	cagagaaagc	ttcttcatte	tgactgctgc	atagtatccc	agtgtctgaa	540
ggtagcatga	ttaattttagc	catccaattc	ataggcacag	gttatttggg	ttgctttcta	600
ttacttgtaa	ttacaaacag	tgctattctg	ttatatcttg	aacatatatt	tttgtgcaca	660
ttatagaaaa	tgtcaaagtg	attttcatgt	aggttgttcc	agtgaatgag	agttcttatt	720
ttgtcacata	cttggcaacc	ctgagattat	caatacgatt	taaatctgtc	tgccaaacag	780
ataggtttgt	aaaaatgtac	tttattgttt	taatgtgaat	ttctttgatt	ataagtaaca	840
attaagaata	tttccaaata	tttgtgaacc	atttttcttt	ttttgtgagc	tgctttttct	900
tgctctttgt	tcatttttaa	tcgggttgtt	ttagcctctt	ttaaattgat	ttttaaaact	960
tgttatatat	taatgatatg	attttaggtt	gtgtccccac	tcaaattctc	tgctgaattg	1020
taactcccaa	tgttggagga	gggtgtctgtg	gggaggtgat	tgatcatag	gggcagattt	1080
cccccttgct	gttctcatgc	tagtgaatga	gttctcacaa	gatttgggtg	tttaaaagtg	1140
tagcacctcc	cacttttgctc	tcttctcct	tctctggcca	tgtaagatgt	gcctgcttcc	1200
cctttgcctt	ctgccatgat	tctaagtctc	ctgaggcctc	cccagccatg	cttctctgtac	1260
agcctgtaaa	ctgtgagcca	attaaacctc	ttttatttat	aaa		1303

<210> 5343
 <211> 977
 <212> DNA
 <213> Homo sapiens

<400> 5343						
ggcaccacca	tgtatctggg	aattgcccgc	aggatgcaga	aggagatcac	cgccttgcca	60
cccagctcca	tgaagatcaa	gatcatcatg	ccccagagt	gcaagtactc	agtgtggatt	120
ggtggctcca	tcctggcctc	actgtccacc	ttccagcaga	tgtggattag	caagcaggag	180
tatgatgagt	tgggccccctc	cgctgtccac	cacaaatgct	tctaaatgga	ctgtgaacag	240
atgtgtagca	tttgcctgcat	gggttaattc	agaagtataa	atgtgcctt	ggcaaattgca	300
tacacctcat	gctaccctca	caaaactgga	atagccttca	caaagaaatt	gtccttgaag	360
gttgtgtctg	atataagcac	tggattgtag	aacttgttgc	tgattttgac	cttgatttca	420

gtaactcaaa	agtaaataaa	accactat	tttcagtaag	cttttttttc	ttctaaaaga	2640
tgacttagaa	atcaaactat	aagaacatga	aatcgggtgct	gtaccaaaagc	cttatatgaa	2700
catattctac	actctgtata	acctgtctgt	gaggagctcc	ctgctctatc	accctcttct	2760
caaaagcctg	ggaatgccag	cgctgcccac	gcctgggggct	gggtcttggg	gacctgtggg	2820
ccaagggcac	cctgggaagt	aaaagatgac	ggtgaggatg	ggacaccctt	ctgctgcctg	2880
agcagactgc	aaggaaacca	gatgtgtgtg	tgtgcgcgca	cctgcatata	tatgtgtgca	2940
tacctgtgcg	tgtgtgtgcg	tgtgcgtgtg	tgacgcaag	agagtgaag	cgaggagag	3000
ctcacagggtg	cacagtgtca	tgggtgaatgt	actaagtacg	agcttgaagg	gaggccagg	3060
ttggctctgg	gagtggggcg	gtgtgggaat	gaagggggga	tgctctctcc	cctgttttct	3120
gcctccttcc	cttctccgtc	agggaaggga	ggtgtattgg	aaacagctac	actctcaatc	3180
aggtgctttt	ttccctcaa	aatctccaaa	ctcaaagcat	ttataagggg	ccctccaat	3240
gggcaggcac	ccccagccac	caaatcacag	acttccaaga	gtaggaggaa	ctgtctcctc	3300
ccgaaccctt	ccttgctttc	ctggggaaga	gggttcttcc	tgacgggacc	ctgggcatcc	3360
tgctgtctgg	cctgggccta	tagactgccc	tgcccttct	tcccaaacac	tgagaagacc	3420
ccgctggaga	tgaccccaaa	gccacgcctg	ctctacggcc	ctaagcaata	gacgcctgcc	3480
ctggctgctg	atgatgggtga	tccctttgtc	ctttgacttg	gcagtcaaaa	atggagtgc	3540
acccagact	cagtcaggaa	gagaacctgc	agcctgcctc	agctcaggct	accacgccag	3600
gctccactcg	ctgggtatttc	caggcttgct	aagtactaac	caactcatcc	ccagtaaacac	3660
tgcatgttca	tatcctgaat	tacaaatcaa	aatgagcaaa	cacgtgcata	agcaaattgag	3720
aaaaaagaag	gcacacatca	aatgatgaga	tgtgcagcca	gtgcagggtac	cccgggagtg	3780
ttgcaagtta	aactgatgaa	aagacgttta	gtatttaatt	gtcctcatg	taacattact	3840
ctgcttcaga	aatgttttgt	attttgat	aaataaacat	ttgctaaaaa	agtt	3894

<210> 5345
 <211> 3402
 <212> DNA
 <213> Homo sapiens

<400> 5345						
agaagaagag	gtgcaaattc	tgttcccttc	ctaccttgaa	gccttcccag	accaccacgg	60
tctctgcaca	agggaggctc	ccattactgt	tctgttggct	tctagacca	ccatcccctc	120
tctttctgtg	gactctgccc	gacttctggc	cacatgcaac	cagcagagta	aactgctcca	180
acacctcggg	catgtcctag	ggcttgccct	cccaccaggg	ccagcccaag	attaggctct	240
cagcagcatc	aaggctctggg	agagccactg	gccacatgt	caccattcta	ttcctcagcc	300
tccaacagga	ctcttcattt	tggggaggga	aaggggaagt	ggggccatag	cccctacctt	360
gaaattgtac	agtgtggagg	ggatgttagt	gcctacctgt	gacctttctg	ctccactgct	420
cagcaagatg	aggtaagggt	gggtgtcaga	ggggacctcc	agcttctctg	aagagccagc	480
ccttaaggca	cttgaggcaa	aggctcattga	gatcagcttt	atgtggagta	aggaggaggc	540
ctgggaaccg	cttgtggcat	cagttggggc	gacagggtga	tgagtgtgct	ctgatggagc	600
ttttacggcc	cacagccact	gccaggagcc	tgagctcttc	cccatgcttg	ggacacgttc	660
cttgggtccc	acagcagaat	ggacattgaa	ttttgggtgt	tttccctttg	gtagaagggtg	720
gaggtatctg	aggagtgtgt	tctgtcttgc	tactctctgc	tactatatag	agcaagagtc	780
gggaataggg	agatgtgtga	gaatcactct	cccatggatc	agtgtgggcc	ctgtccctct	840
tccccactgt	caccaaccag	cagcttgggg	aaaaggctct	gtcgtggatt	tttgtgtgct	900
gcttcccgtc	tccactcttc	tgggcggtag	atgttcatgg	tgatccactt	tgggcggtct	960
gaaagtagga	ggtgggggaa	gaggcaagcc	tgacacaca	cttcctgtcc	acaggggggt	1020
gcctgtggca	ttggagggtg	gagtctcaga	gtccagggac	tgggaggaag	gtacttgatg	1080
ggatggtctt	gattctggaa	cttttagactg	aggtgttaga	aaggggaatt	gttggctagg	1140
ggagaagagc	agtttaacgc	tccacttgct	aagtcgtctg	tatcagtgtc	agaaggctct	1200
gacctcccat	tcagatttaa	tttcctaact	gccaggtgtg	gggctgggga	tagagggccc	1260
agaagggggc	cgagtcactg	acgtgaaggg	accacatccc	gcttcatgtc	agtgaactcc	1320
gccccctggg	cttcagtgtt	tttctcttcc	ccaggaggga	ctttgatcat	gcaggataga	1380
attctcccat	cgcacacctg	ggggcaagtt	ttagatgagc	ttctttcctc	catttcacct	1440
ggtggtctga	ggacacacag	agggtggggg	tgagcaggca	gtgtgggtgg	ggaggggcta	1500
cctccccccag	accctttaca	aactctgtac	ctctcggtgc	gcggcagcct	cttgctgtag	1560
ttcttctttt	ctggatatga	ctgtcagttt	cgctcatgaga	tttcttgctc	tcatttcgaa	1620
ctctttcttt	cttccacttt	ctttgggggc	gacccccgat	ccatgccagg	tcttctctgtg	1680
aagaccgttc	caacctcggt	tccattttct	gaatgttgag	tattacaaca	tcactgcgct	1740
agggtgcttc	atgggtgctg	tctcgaagag	gccagttggg	ctgaatctcc	ttcctcccac	1800
tggctcctga	tatcttgcgt	tattttgtct	tctttctgat	tttccctag	gggtttgggg	1860

tgggtgactt	aggggcggt	tttgtgttct	ccctctctct	ctctttcttt	tctgtatgta	1920
tgtatggact	ggttaaagt	agtttgggca	gctgacttta	tggtatgggt	tggtgactt	1980
ttgttcaaca	ttaaagacaa	accaacaaat	tgtacagctg	cacacagaac	acctttgagt	2040
gtgaacttga	atggcaacta	gaggcttact	ttttgaactt	caggatgta	actcaaaagt	2100
aaataaaacc	actatTTTT	cagtaagctt	TTTTTcttc	taaaagatga	cttagaaatc	2160
aaactataag	aacatgaaat	cgggtgctga	ccaaagcctt	atatgaacat	attctacact	2220
ctgtataacc	tgtctgtgag	gagctccctg	ctctatcacc	ctcttctcaa	aagcctggga	2280
atgccagcgc	gtgccaagcc	tggggctggg	tcttggggac	ctgtggggcca	agggcaccct	2340
gggaagtaaa	agatgacggt	gaggatggga	cacccttctg	ctgcctgagc	agactgcaag	2400
gaaaccagat	gtgtgtgtgt	gcgcgcacct	gcataatata	gtgtgcatac	ctgtgcgtgt	2460
gtgtgcgtgt	gcgtgtgtgc	acgcaagaga	gtgagagcgg	gagagagctc	acaggtgcac	2520
agtgtcatgg	tgaatgtact	aagtacgagc	ttgaagggag	gcccagggtg	gctctgggag	2580
tggggcggtg	tgggaatgaa	ggggggatgc	tctctcccct	gttttctgcc	tccttccctt	2640
ctccgtcagg	gaaggggagt	gtattggaaa	cagctacact	ctcaatcagg	tgcttttttt	2700
ccctcaaaat	ctccaaactc	aaagcattta	taagggggccc	ttccaatggg	caggcaccct	2760
cagccaccaa	atcacagact	tccaagagta	ggagggaactg	tctcctcccg	aacctttcct	2820
tgctttcctg	gggaagaggg	ttcttccctg	agggaccctg	ggcatcctgc	tgctgggcct	2880
gggcctatag	actgccctgc	cccttcttcc	caaacactga	gaagaccccc	ctggagatga	2940
ccccaaagcc	acgcctgctc	tacggcccta	agcaatagac	gcctgccctg	gctgctgatg	3000
atggtgatcc	ctttgtcctt	tgacttggca	gtcaaaaatg	gagtgcacac	ccagactcag	3060
tcaggaagag	aacctgcagc	ctgcctcagc	tcaggctacc	acgccaggct	ccagctcgct	3120
ggtattttcca	ggcttgctaa	gtactaacca	actcatcccc	agtaacactg	catgttcata	3180
tcttgaatta	caaatcaaaa	tgagcaaaca	cgtgcataag	caaatgagaa	aaaagaaggc	3240
acacatcaaa	tgatgagatg	tgcagccagt	gcaggtaccc	cgggagtgtt	gcaagttaaa	3300
ctgatgaaaa	gacgtttagt	atttaattgc	tcctcatgta	acattactct	gcttcagaaa	3360
tgttttgtat	ttt gatataa	ataaacattt	gctaaaaaag	tt		3402

<210> 5346
 <211> 3894
 <212> DNA
 <213> Homo sapiens

<400> 5346						
gccagatggg	gcaggcagtg	aggagagact	caggactgca	accttttcggc	tccttattcc	60
tgctcatcac	tcagaaaagg	gcagtactaa	cccctttcct	aaccaagaca	tggcactccc	120
taagagctct	tgtctataga	gtttggtcct	tagaggaaag	cagatacctt	cagcgtgaga	180
agggcttggg	tgacagtttt	ggggatttat	gggaagagta	ggttggggta	aagcttgagt	240
ctaactcttg	atccttacat	ggacctatga	ggccctgcc	ttcagtcagg	cactgtcctt	300
gggtcctcaa	attaactgct	gagaacactc	cccactttcc	gaggacgctg	atgggaaatg	360
ggctctgtcc	atgcagctgg	aaggatccag	tgctggtgcc	actgtcagtg	gcaccatcct	420
tgccttgaat	gatctttcct	gcaggctcct	gcagctgagt	gtttcttgta	agatttttca	480
gggggattgg	gcagaagaaa	gaggtgcaaa	ttctgttccc	ttcctacctt	gaagccttcc	540
cagaccacca	cgggtctctgc	acaagggagg	ctcccattac	tgttctgttg	gcttctagac	600
ccaccatccc	ctctctttct	gtggactctg	cccgaactct	ggccacatgc	aaccagcaga	660
gtaaactgct	ccaacacctc	gggcatgtcc	tagggcttgc	cctcccacca	gggccagccc	720
aagattaggt	cctcagcagc	atcaaggtct	gggagagcca	ctggcccaca	tgtcaccatt	780
ctattcctca	gcctccaaca	ggactcttca	ttttggggag	ggaaagggaa	gatggggcca	840
tagccccctac	cttgaaattg	tacagtgtgg	aggggatgtt	agtgcctacc	tgtgaccttt	900
ctgctccact	gctcagcaag	atgaggtaag	gttgggtgtc	agaggggacc	tccagcttct	960
ctgaagagcc	agcccttaag	gcacttggag	caaaggtcat	tgagatcagc	tttatgtgga	1020
gtaaggagga	ggcctgggaa	ccgcttgtgg	catcagttgg	ggcgacaggt	ggatgagtgt	1080
gctctgatgg	agctttttacg	gcccacagcc	actgccagga	gcctgagctc	ttccccatgc	1140
ttgggacacg	ttccttgggtc	cccacagcag	aatggacatt	gaattttggg	gctttttcct	1200
ttggtagaag	gtggagggtat	ctgaggagt	gtttctgtct	tgctacctct	gtctactata	1260
tagagcaaga	gtcgggaata	gggagatgtg	tgagaatcac	tctcccatgg	atcagtgtgg	1320
gccctgtccc	tcttccccac	tgtcaccaac	cagcagcttg	gggaaaaggc	tctgtcgtgg	1380
atttttgcgt	cctgcttccc	gcttccactc	ttcttggcgg	tagatgttca	tggtgatcca	1440
ctttggggcg	tctgaaagta	ggagggtggg	gaagaggcaa	gcctgcacac	acacttccctg	1500
tccacagggg	gttgctgtgtg	gcattggagg	gtggagtctc	agagtccagg	gactgggagg	1560
aaggtaactg	atgggatggg	cttgattctg	gaacttttaga	ctgagggtgtt	agaaagggga	1620

attgttggct	aggggagaag	agcagtttaa	cgctccactt	gctaagtcgt	ctgtatcagt	1680
gtcagaaggt	cttgacctcc	cattcagatt	taatttcccta	actgccaggt	gtggggctgg	1740
ggatagaggg	cccagaaggg	ggcgagtgca	ctgacgtgaa	gggaccacat	cccgcttcat	1800
gtcagtgact	cctgccccct	ggtcttcagt	gtttttctct	tccccaggag	ggactttgat	1860
catgcaggat	agaattctcc	catcgcacac	ctggggggcaa	gttttagatg	agcttctttc	1920
ctccatttca	cctggtgggc	tgaggacaca	cagaggggtg	gggtgagcag	gcagtgtggg	1980
tggggagggg	ctacctcccc	cagacccctt	acaaactctg	tacctctcgg	tgcgcggcag	2040
cctcttgctg	tagttcttct	tttctggata	tgactgtcag	tttcgtcatg	agatttcttg	2100
ctctcatttc	gaactctttc	tttcttccac	tttctttggg	ggcgaccccc	gatccatgcc	2160
aggtcttcct	gtgaagaccg	ttccaacctc	gtttccattt	cttgaatgtt	gagtattaca	2220
acatcactgc	gctaggggtg	ttcatgggtg	tgttctcgaa	gaggccagtt	gggctgaatc	2280
tccttcctcc	cactgggtcc	tgatatcttg	ctgtattttg	tcttctttct	gatttttccc	2340
taggggtttg	gggtgggtga	cttaggggcg	gcttttgtgt	tctccctctc	tctctctttc	2400
ttttctgtat	gtatgtatgg	actggttaaa	gtgagtttgg	gcagctgact	ttatggtatg	2460
ggttggctga	cttttgttca	acattaaaga	caaaccaaca	aattgtacag	ctgcacacag	2520
aacacctttg	agtgtgaact	tgaatggcaa	ctagaggctt	actttttgaa	cttcaggtat	2580
gtaactcaaa	agtaaaataaa	accactattt	tttcagtaag	cttttttttc	ttctaaaaga	2640
tgacttagaa	atcaaactat	aagaacatga	aatcggtgct	gtaccaaaagc	cttatatgaa	2700
catattctac	actctgtata	acctgtctgt	gaggagctcc	ctgctctatc	accctcttct	2760
caaaagcctg	ggaatgccag	cgctggtcaa	gcctggggct	gggtcttggg	gacctgtggg	2820
ccaagggcac	cctgggaagt	aaaagatgac	ggtgaggatg	ggacaccctt	ctgctgcctg	2880
agcagactgc	aaggaaacca	gatgtgtgtg	tgtgcgcgca	cctgcatata	tatgtgtgca	2940
tacctgtgcg	tgtgtgtgcg	tgtgcgtgtg	tgacgcaag	agagtgaag	cgggagagag	3000
ctcacaggtg	cacagtgtca	tggatgaatg	actaagtacg	agcttgaagg	gaggccagg	3060
ttggtctctg	gagtggggcg	gtgtgggaat	gaagggggga	tgctctctcc	cctgttttct	3120
gcctccttcc	cttctccgtc	agggaaagga	ggtgtattgg	aaacagctac	actctcaatc	3180
aggtgctttt	tttccctcaa	aatctccaaa	ctcaaagcat	ttataagggg	cccttccaat	3240
gggcaggcac	ccccagccac	caaatcacag	acttccaaga	gtaggaggaa	ctgtctctct	3300
ccgaaccctt	ccttgctttc	ctggggaaga	gggttcttcc	tgcagggacc	ctgggcatcc	3360
tgctgctggg	cctgggccta	tagactgccc	tgcccttctt	tcccaaacac	tgagaagacc	3420
ccgctggaga	tgacccccaa	gccacgcctg	ctctacggcc	ctaagcaata	gacgcctgcc	3480
ctggctgctg	atgatggtga	tccctttgtc	ctttgacttg	gcagtcaaaa	atggagtgc	3540
acccagact	cagtcaggaa	gagaacctgc	agcctgcctc	agctcaggct	accacgccag	3600
gtccactctg	ctggattttc	caggtctgtc	ccactttccg	caactcatcc	ccagtaacac	3660
tgcatgttca	tatcctgaat	tacaaatcaa	aatgagcaaa	cacgtgcata	agcaaatgag	3720
aaaaaagaag	gcacacatca	aatgatgaga	tgtgcagcca	gtgcaggtac	cccgggagtg	3780
ttgcaagtta	aactgatgaa	aagacgttta	gtatttaatt	gtcctctcatg	taacattact	3840
ctgcttcaga	aatgttttgt	attttgatat	aaataaacat	ttgctaaaaa	agtt	3894

<210> 5347
 <211> 3887
 <212> DNA
 <213> Homo sapiens

<400> 5347						
gccagatggt	gcaggcagtg	aggagagact	caggactgca	acctttcggc	tccttattcc	60
tgctcatcac	tcagaaaagg	gcagtactaa	cccctttcct	aaccaagaca	tggcactccc	120
taagagctct	tgtctataga	gttttggtcct	tagaggaaag	cagatacctt	cagcgtgaga	180
agggtctggt	tgacagtttt	ggggattatt	gggaagagta	ggttgggtaa	agcttgagtc	240
taactcttga	tccttacatg	gacctatgag	gccctgcat	tcagtcaggc	actgtccttg	300
ggtcctcaaa	ttaactgctg	agaacactcc	ccactttccg	aggacgctga	tgggaaatgg	360
gctctgtcca	tgacagctgga	aggatccagt	gctggtgcca	ctgtcagtgg	caccatcctt	420
gccttgaatg	atctttcttg	caggctcctg	cagctgagtg	tttcttgtaa	gatttttccag	480
ggggattggg	caagaagaag	aggtgcaa	tctgttccct	tcccaccttg	aagccttccc	540
agaccaccac	ggtctctgca	caagggaggc	tccattact	gttctgttgg	cttctagacc	600
caccatcccc	tctctttctg	tggactctgc	ccgacttctg	gccacatgca	accagcagag	660
taaactgctc	caacacctcg	ggcatgtcct	agggtctgcc	ctcccaccag	ggccagccca	720
agattaggtc	ctcagcagca	tcaaggtctg	ggagagccac	tggcccacat	gtcaccattc	780
tattcctcag	cctccaacag	gactcttcat	tttggggagg	gaaaggggaag	atggggccat	840
agcccctacc	ttgaaattgt	acagtgtgga	ggggatgtta	gtgcctacct	gtgacctttc	900

tgctccactg	ctcagcaaga	tgaggtaagg	ttgggtgtca	gaggggacct	ccagcttctc	960
tgaagagcca	gcccttaagg	cacttggagc	aaaggtcatt	gagatcagct	ttatgtggag	1020
taaggaggag	gcctgggaac	cgcttgtggc	atcagttggg	gcgacaggtg	gatgagtgtg	1080
ctctgatgga	gctttttacgg	cccacagcca	ctgccaggag	cctgagctct	tccccatgct	1140
tgggacacgt	tccttgggtcc	ccacagcaga	atggacattg	aatttttggtg	cttttccctt	1200
tggtagaagg	tggaggtatc	tgaggagtgt	tttctgtctt	gctacctctg	tctactatat	1260
agagcaagag	tcgggaatag	ggagatgtgt	gagaatcact	ctcccatgga	tcagtgtggg	1320
ccctgtccct	cttcccact	gtcaccaacc	agcagcttgg	ggaaaaggct	ctgtcgtgga	1380
tttttgctgc	ctgcttcccc	cttccactct	tcttggcggt	agatgttcat	ggtgatccac	1440
tttgggcggt	ctgaaagtag	gaggtggggg	aagaggcaag	cctgcacaca	cacttcctgt	1500
ccacaggggg	ttgcctgtgg	cattggaggg	tggagtctca	gagtccaggg	actgggagga	1560
aggtacttga	tgggatggtc	ttgattctgg	aacttttagac	tgaggtgtta	gaaaggggaa	1620
ttgttggcta	ggggagaaga	gcagtttaac	gctccacttg	ctaagtcgtc	tgtatcagtg	1680
tcagaaggtc	ttgacctccc	attcagattt	aatttcctaa	ctgccagggt	tggggctggg	1740
gatagagggc	ccagaagggg	gcgcagtcac	tgacgtgaag	ggaccacatc	ccgcttcatg	1800
tcagtgactc	ctgccccttg	gtcttcagtg	tttttctctt	ccccaggagg	gactttgatc	1860
atgcaggata	gaattctccc	atcgcacacc	tgggggcaag	tttttagatga	gcttctttcc	1920
tccatttcac	ctggtggtct	gaggacacac	agagggtggg	ggtgagcagg	cagtgtgggt	1980
ggggaggggc	tacctcccc	agaccctta	caaactctgt	acctctcggt	gcgcggcagc	2040
ctcttctgt	agttcttctt	ttctggatat	gactgtcagt	ttcgtcatga	gatttcttgc	2100
tctcatttcg	aactctttct	ttcttccact	ttctttgggg	gegacccccg	atccatgcca	2160
ggtcttctctg	tgaagaccgt	tccaacctcg	tttccatttc	ttgaatgttg	agtattacaa	2220
catcactgcg	ctagggtgct	tcatggtgct	gttctcgaag	aggccagttg	ggctgaatct	2280
ccttctctcc	actggctcct	gatatcttgc	tgtattttgt	cttctttctg	atttttccct	2340
aggggttttg	ggtgggtgac	ttagggcggg	cttttgtgtt	ctccctctct	ctctctttct	2400
tttctgtatg	tatgtatgga	ctggttaaa	tgagtttggg	cagctgactt	tatggtatgg	2460
gttggtgac	ttttgttcaa	cattaaagac	aaaccaacaa	attgtacagc	tgcacacaga	2520
acacctttga	gtgtgaactt	gaatggcaac	tagaggctta	ctttttgaac	ttcaggtagt	2580
taactcaaaa	gtaaataaaa	acactatttt	ttcagtaagc	tttttttct	tctaaaagat	2640
gacttagaaa	tcaaactata	agaacatgaa	atcgggtgctg	taccaaagcc	ttatatgaac	2700
atattctaca	ctctgtataa	cctgtctgtg	aggagctccc	tgctctatca	ccctcttctc	2760
aaaagcctgg	gaatgccagc	gcgtgccaa	cctggggctg	ggtcttgggg	acctgtgggc	2820
caagggcacc	ctgggaagta	aaagatgacg	gtgaggatgg	gacacccttc	tgctgcctga	2880
gcagactgca	aggaaaccag	atgtgtgtgt	gtgcgcgcac	ctgcatatat	atgtgtgcat	2940
acctgtgtgt	gcgtgtgcgt	gtgtgcacgc	aagagagtga	gagcgggaga	gagctcacag	3000
gtgcacagtg	tcatggtgaa	tgtactaagt	acgagcttga	agggaggccc	aggttggctc	3060
tgggagtggg	gcggtgtggg	aatgaagggg	ggatgctctc	tccctgtttt	tctgcctcct	3120
tcccttctcc	gtcaggggaa	ggaggtgtat	tggaaacagc	tacactctca	atcagggtgct	3180
ttttttccct	caaaatctcc	aaactcaaag	catttataag	gggcccttcc	aatgggcagg	3240
cacccccagc	caccaaataca	cagacttcca	agagtaggag	gaactgtctc	ctcccgaacc	3300
cttcttctgt	ttcttgggga	agagggttct	tcttgcaggg	acctggggca	tcctgtctgt	3360
gggcctgggc	ctatagactg	ccctgcccc	tcttcccaa	cactgagaag	accccgctgg	3420
agatgacccc	aaagccacgc	ctgctctacg	gccctaagca	atagacgcct	gccctggctg	3480
ctgatgatgg	tgatcccttt	gtcctttgac	ttggcagtc	aaaatggagt	gacaccccag	3540
actcagtcag	gaagagaacc	tgcagcctgc	ctcagctcag	gctaccacgc	caggctccac	3600
tcgctgggtat	ttccaggctt	gctaagtact	aaccaactca	tccccagtaa	cactgcatgt	3660
tcatatcctg	aattacaaat	caaaatgagc	aaacacgtgc	ataagcaa	gagaaaaaag	3720
aaggcacaca	tcaa	atgatg	cag	gag	gag	3780
ttaaactgat	gaaaagacgt	ttagtattta	attgtctctc	atgtaacatt	actctgcttc	3840
agaaatgttt	tgtattttga	tataaataaa	catttgctaa	aaaagtt		3887

<210> 5348
 <211> 959
 <212> DNA
 <213> Homo sapiens

<400> 5348						
agtctgggat	actagctcat	gccttgacgc	cacctcttct	cctgctcttc	ctttgggtatt	60
ctctctgttc	agagttgctt	gggtctttct	gatggaaatg	tgtatatatg	aaaagtttgt	120
aaaataacaa	aacaaataac	ccacctgcag	gaaggacaag	tgagctgaag	gttgtgtgga	180

gctgcaggat	ctgatagccc	taaagaacca	ggaccaatgt	gtctcttgcc	acttgggagg	240
gatgttgact	tgaacttctt	tgcagagggg	cttaacaggg	caaggctgag	gagatgaaaa	300
ctgtgactcc	atccccacgt	ggctgtggaa	aggtaaccag	ttcctcagag	aaaacctggc	360
ttcacagcat	tagaaagggg	gtggttgaga	ctacctaggg	acctacgggtg	acacctgtct	420
tggttttag	caactgtagct	cagacagctc	agaccgctca	tagagggcat	ggcaatggga	480
gagttttag	ggctggctgc	ctgggcttgg	tcttgagaa	cacatggcct	gttttagtgtt	540
gctgcagatt	cttagagcca	gtgtgaatgt	ggtagtagt	ataaatatgt	catctatgtt	600
tttttcagtt	atttttaatt	ggaaataaag	tgccattgca	aataggatgc	tccaatcctg	660
ggacactgag	tggaggatga	ggagggagag	atgaactgtg	ggccggcctg	ggagaggggg	720
tcttagtgga	accttccttc	tggcctccag	ccggggactt	acaaaactga	acaatgtatt	780
ggcagaactg	gaccacaaat	gggagattct	ggggagcagg	agttcacttg	tatctgagca	840
ggaagcagtg	tgccctgaag	aatacctctc	tgagcaaatt	ccagacctca	cacatatgca	900
agggctctgc	cttgcagcct	cagcaagcgt	ctcctggtgc	tagctccttc	ctgacttgc	959

<210> 5349
 <211> 482
 <212> DNA
 <213> Homo sapiens

<400> 5349						
gccagatggt	gcaggcagtg	aggagagact	caggactgca	acctttcggc	tccttattcc	60
tgctcatcac	tcagaaaagg	gcagtactaa	cccctttcct	aaccaagaca	tggcactccc	120
taagagctct	tgtctataga	ggttggtcct	tagaggaag	cagatacctt	cagcgtgaga	180
agggcttggt	tgacagtttt	gggtatttat	gggaagagta	ggttggggta	aagcttgagt	240
ctaactcttg	atccttacat	ggacctatga	ggccctgccc	attcagtcag	gcactgtcct	300
tgggtcctca	aattaactgc	tgagaacact	ccccaacccc	tttccgagga	cgtgatggg	360
aaatgggctc	tgtccatgca	gctggaagga	tccagtgtcg	gtgccactgt	cagtggcacc	420
atccttgccct	tgaatgatct	ttcttgcagg	ctcctgcagc	tgagtgtttc	ttgtaagatt	480
tt						482

<210> 5350
 <211> 959
 <212> DNA
 <213> Homo sapiens

<400> 5350						
agtctgggat	actagctcat	gccttgacgc	cacctccttc	cctgctcttc	ctttgggtatt	60
ctctctgttc	agagttgctt	gggtctttct	gatggaaatg	tgtatatatg	aaaagtttgt	120
aaaataacaa	aacaaataac	ccacctgcag	gaaggacaag	tgagctgaag	gttgtgtgga	180
gctgcaggat	ctgatagccc	taaagaacca	ggaccaatgt	gtctcttgcc	acttgggagg	240
gatgttgact	tgaacttctt	tgcagagggg	cttaacaggg	caaggctgag	gagatgaaaa	300
ctgtgactcc	atccccacgt	ggctgtggaa	aggtaaccag	ttcctcagag	aaaacctggc	360
ttcacagcat	tagaaagggg	gtggttgaga	ctacctaggg	acctacgggtg	acacctgtct	420
tggttttag	caactgtagct	cagacagctc	agaccgctca	tagagggcat	ggcaatggga	480
gagttttag	ggctggctgc	ctgggcttgg	tcttgagaa	cacatggcct	gttttagtgtt	540
gctgcagatt	cttagagcca	gtgtgaatgt	ggtatgtagt	ataaatatgt	catctatgtt	600
tttttcagtt	atttttaatt	ggaaataaag	tgccattgca	aataggatgc	tccaatcctg	660
ggacactgag	tggaggatga	ggagggagag	atgaactgtg	ggccggcctg	ggagaggggg	720
tcttagtgga	accttccttc	tggcctccag	ccggggactt	acaaaactga	acaatgtatt	780
ggcagaactg	gaccacaaat	gggagattct	ggggagcagg	agttcacttg	tatctgagca	840
ggaagcagtg	tgccctgaag	aatacctctc	tgagcaaatt	ccagacctca	cacatatgca	900
agggctctgc	cttgcagcct	cagcaagcgt	ctcctggtgc	tagctccttc	ctgacttgc	959

<210> 5351
 <211> 959
 <212> DNA
 <213> Homo sapiens

<400> 5351

agtctgggat	actagctcat	gccttgacgc	cacctccttc	tctgctcttc	ctttggtatt	60
ctctctgttc	agagttgctt	gggtctttct	gatggaaatg	tgtatatatg	aaaagtgtgt	120
aaaataacaa	aacaaataac	ccacctgcag	gaaggacaag	tgagctgaag	gttgtgtgga	180
gctgcaggat	ctgatagccc	taaagaacca	ggaccaatgt	gtctcttgcc	acttgggagg	240
gatgttgact	tgaacttctt	tgcagagggg	cttaacaggg	caaggctgag	gagatgaaaa	300
ctgtgactcc	atccccacgt	ggctgtggaa	aggtaaccag	ttcctcagag	aaaacctggc	360
ttcacagcat	tagaaaaggg	gtgggttgaga	ctacctaggg	acctacggtg	acacctgtct	420
tggttttag	cactgtagct	cagacagctc	agaccgctca	tagagggcat	ggcaatggga	480
gagttttag	ggctggctgc	ctgggcttgg	tcttgagaga	cacatggcct	gttttagtgt	540
gctgcagatt	cttagagcca	gtgtgaatgt	ggtatgtagt	ataaatatgt	catctatgtt	600
tttttcagtt	atttttaatt	ggaaataaag	tgccattgca	aataggatgc	tccaatcctg	660
ggacactgag	tggaggatga	ggagggagag	atgaactgtg	ggccggcctg	ggagaggggg	720
tcttagtgga	accttccttc	tggcctccag	ccggggactt	acaaaactga	acaatgtatt	780
ggcagaactg	gaccacaaat	gggagattct	ggggagcagg	agttcacttg	tatctgagca	840
ggaagcagtg	tgccctgaag	aatacctctc	tgagcaaatt	ccagacctca	cacatatgca	900
agggctctgc	cttgacgcct	cagcaagcgt	ctcctgggtgc	tagctccttc	ctgacttgc	959

<210> 5352

<211> 13789

<212> DNA

<213> Homo sapiens

<400> 5352

tcaagaggac	catgaaaagt	actttattga	ggtcactggg	agtacaagat	atctgtcccc	60
agccctagcc	tcagcctctc	ctcagtagag	tctcatgggt	ggaaaagacc	aggcttccgg	120
actgctctgg	gctactaccc	aggagaggct	gggcagtggg	gaaggggggc	tggggctcca	180
gtccaggaca	gaggttcggg	gcaacagggg	tgatgaaggc	tgaggcaggg	gctgaggggag	240
gccaaccccc	cagggccgag	gaggggggtg	cgtggctacc	agccagatgc	tttttaacaa	300
gtcaaacgct	gttggggggac	cccaggctgt	tccagatggc	gaagacagtg	agggaaagta	360
tgggtggccag	ggacctcttg	gcggtgccag	actccccctg	tgcgagtggt	gcatgctgga	420
gggtgtagggc	atgggggaagg	tgaactcctt	tgctccttgt	tgcttctctt	gcctctctctg	480
ctctgggact	tgatcagggc	tattaatcca	catagagggtc	atctttctct	cagagacccc	540
aggcttggcc	cctggcacag	aggaaaagaag	gaagaggct	agctgagcta	gagccgacaa	600
aggaaagggg	agtacagggg	caggagggac	gctcacctgg	caaggggtggc	tggcagcccc	660
gaagcaccag	ggcaagggtca	ggcacacaa	catgacaggc	ctgcaagggtg	tgcacgatgg	720
catccctggc	atcctgaatc	aggttcctcc	gggggaaggc	ctgtggcaaa	ctcagctgac	780
actgcagctc	tgccagcagc	tgccccacgc	cagacaactc	tggggaactg	ggtgggcctg	840
ggcccgaacc	tccaggcacc	tggttctctt	tgtccctgga	ccgtggggct	ggttcctggg	900
ccttgcttgg	gcttggggag	ggcttggcgg	ggagtgtggg	gctgcctggc	accaggggtcc	960
cactgctaag	cagccttgca	acatctagga	atttcacctc	gtggttgaag	agaccccggg	1020
gctcccggct	cagccggccc	tgggttatga	ctacagagctt	ggaggcagta	gggaccacag	1080
gtggatcccg	aatggccaca	ggaggatcgt	ggtgggctaa	tggccggcgg	ctgcccacca	1140
gggccttggt	acgttcccg	ctagtcttcc	gacgacggac	acgaccaggt	ttctcaggct	1200
gctgaaaagg	ctgggagact	ggtccctggg	tatccatggg	gtcctggaat	ataaagatag	1260
ggtggccatc	agcatgcaga	taagtcaagg	ggagttagca	agtgaatagg	gagggctggg	1320
cgcggtggct	tatgcctgta	ataccaacac	tggggtaggc	caaggcaggc	cgatcactta	1380
ggccagggtca	cttttagacca	gcctagccaa	catggcaaaa	tgctgtcttt	actgaaaata	1440
caaaaattgg	ccagccgcag	tggcccatac	ctataatcct	agtacttttg	gaggccaagg	1500
caggcagatt	acctgaggtc	aggagttcga	gaccagcctg	gccaacatag	tgaaacccca	1560
tctctactaa	aaatacaaaa	attagccaga	cgtgtgggca	tgacctgta	attccagcta	1620
ctcaagaggc	tgaggcagga	gaatcacttg	aacctgagg	gtggagggtg	cgggtgagctg	1680
agatcatgcc	attgcactcc	agcctgggca	acagagcaag	actccatctc	aaaaaaaaaa	1740
aaaattagct	gggcatgggtg	gtgcacgcct	gtaatcccag	ctactcagga	ggctgaggca	1800
ggagaattgc	ttgaaccag	aaggcagaag	ttgcagttag	tcacgattgt	gccactgcac	1860
ttcagtctgg	gcaatagagt	gagactccat	ctcaaaaaca	aaacaaaaca	aaacaagtga	1920
atagggagat	gttttggggg	gtggtgggaa	tactatttag	aatgaccaga	tgaggccagg	1980
catggtggct	caaatctgta	atcctagcac	tttgggaggc	tgaggcggga	gtatcgcttg	2040
aggctaggaa	ttcaagacca	acctgagcag	caaagtgaga	ccctcatctc	tacaaaaaat	2100
aaaaataaaa	attagctgga	tgatgccagg	tgtggtgact	catgcctgta	atcccagcac	2160

tcttgacgcc	aagtgatctg	cccacctcag	cctcccaaag	tgctgggatt	ataggagtga	5880
gccaccgtgc	ctagctgatt	atgacttctt	ttttggagac	agggactcac	tctgtcacc	5940
aacctggagt	gcagtgcac	catcatgggc	cactgccacc	tcattctcca	ggctcaagct	6000
atcctcctgc	ctcagcctcc	caactaactg	ggactacagg	cacttgccct	tttttttttt	6060
tttttttttt	ttgagacggc	gtctcgctct	gtctcccagg	ctgaagtgca	ctgggtgccat	6120
ctgggtctac	tgcaagctct	gctcccagg	ttcacgctat	tctcctgctt	cagcctccca	6180
agttagctgg	acaacaggcg	cctgccacca	cgccccgcta	attttttgta	tttttagtag	6240
agacgggggt	tcaccgtggt	agccaggatg	gtctcgatcc	tgacctcggt	atctgccacc	6300
ctcggcctcc	caaagtgtcg	ggattacagg	cgtgagccac	cgcgcccagc	cttttttttt	6360
tttttttttt	agacagggtc	tcactgtggt	accagggtcg	gtctcaaact	tctgggttca	6420
agcgatcctc	gcacctcagc	ctccccagta	gctgggacta	caggcatgca	tcactgcacc	6480
tggtccctc	agactttatt	tgtttggtta	tttttgtaat	taagacagag	tctcgctgtg	6540
tcaccaaacg	tggggccactg	tggcccaggc	tgggctgcag	tggcgcgatc	tcagctcact	6600
gcaacctctg	cctcccagac	tgaagcaat	gtcctgcctc	agcctccca	agttagctggg	6660
actacggggc	tgtgtgccca	tgcttagcta	attttttttt	tttttttgta	tatttagtag	6720
acacgtgggt	tcgcatgtgt	ggccagggtg	gttgacctca	agtgatccga	ccatgtcagc	6780
ctcccaaagt	gctgggatta	caggcatgag	cctccatgct	ggcctccctc	agactttaaa	6840
atcaagctat	tccacgatat	tccccaacc	taataagaaa	gtgattacct	gtgtcttttc	6900
tttctgcttg	cccattcttc	attatctttc	agaccagct	gagatactac	tcctaggaaa	6960
cccatagtcc	tcagagtctt	tctcctcttc	ctccccagag	gtccctgtct	ctccctcaaa	7020
cacaactttg	acaccctctt	acctctgtgt	ctggatctgt	ctccctaaac	acattgggac	7080
aaggtcagga	gctgacctac	tcatttacta	ctcattcagc	aagcacttgt	ggaataacca	7140
ctgtgtgccc	ggcccagttc	caggaaagtg	gattgaaaac	ataaacacaa	tgaataacac	7200
tcattctctgt	ctcagtatca	atccacctcg	aaggaatgaa	tacatgggaa	ggtcccacct	7260
ggagtgaggc	tacaagaaca	tgaccaggac	gtttagcagg	gagttagccc	cccacctggt	7320
cccagagaag	agggagatct	gagaagacac	tgaggctctga	gattaatttg	gggcagcggt	7380
gggggagagg	cgcgacccta	ggtggccttg	gctatggatg	taggtttcag	agctcagaca	7440
taccagtttg	gcctgtgggt	ttagagagag	tgtagaggct	gcagatctgc	aagatgatct	7500
gccggaggga	cgccagactg	gacctgagcc	ctggaggcgt	ctctaatttc	ctttctcttt	7560
ctgcaccttc	ttctaccctc	caagcaggtc	ctatggtgtc	ttgaatgcaa	agatatgtag	7620
tttatatggt	atgccacgcg	cgcgcacaca	cacacggtgt	tttgatagg	ggtcctgtga	7680
tgtcttgaat	gcaaagatat	gtactttaga	tttcaacaca	cacacacaca	cacacacaca	7740
cacacacaca	cacacacca	cggtgttttg	agtaggggaa	gcccacgagt	agataggctc	7800
actaaagccc	tggcgcgggc	ttagagtggc	tccttagaag	ggagcctcga	attttcacat	7860
tttgtcatct	tccttttctg	tccccacat	cagtagaaaa	taggagcgct	ccccccagcc	7920
aggtgcattc	gagccacccc	ttcaagggaa	tataagaatg	gactcgtcca	ctcgctcccc	7980
tccccaccc	acgtgaatgg	gtcaccccc	cccccgcaac	agtaggtggt	cccttcgcga	8040
catctcactc	tgtacagcaa	atggtttctt	ccattttgct	agacagaggg	ctagattttc	8100
cccgccactt	ctcgactctt	caggtagttc	gccccctccc	gtgaccgggtg	ggtggtttct	8160
ccctcctccc	cgctcggga	gctggatggt	ctcgctctc	cctcccccca	ccccgtgccg	8220
ggtgcgcggc	ctgggagtca	gcggcccag	cggaagcgc	cgggcgagcc	cactgtgcgg	8280
ccgtcgtggg	ggaagcgaag	gttcctgatt	ccacctacct	cctaagtga	ggcttcctgc	8340
cctggagagg	aggcggcgcc	ctgtatcggc	cttcgtctct	cgcgggtgtg	ctagcgttgg	8400
gacggtcctt	tgttgccgcg	aggggtagga	gtgggcgtgg	cggagccagc	tccgttcgga	8460
acactcccgc	gccagccga	ctcgctcctc	ctgcaggagc	tgcggcgcca	agatgagtgg	8520
agaggagaa	ccagccacca	agccccagcc	ggtgcaggag	gtacaggcg	acgggcgctg	8580
gatgtccctg	gtgagcggtt	ccacctggga	tattgaggag	tccggggggcg	cgggggggtg	8640
ctcaggagaa	cggctgggtt	gtgccactct	cactacctga	ttgggaaact	gagggcagtt	8700
gaggaggcgc	tgcctaaggg	agcagggcgg	ggcgggccc	ggagcgtgca	tgccattgac	8760
tccctctcgc	gcgctcccgc	agcaccatcg	gttcgtggct	gacagcaaag	ataaggaacc	8820
cgaagtcgtc	ttcatcgggg	actccttggt	ccagctcatg	caccagtgcg	aggtgagggc	8880
agtcctctc	ccctgcccc	atcagccct	gtgtccatgc	tgaccacatc	ggaccagaac	8940
ccaggccagc	tgaggtatta	tgagagtacc	cagattggcc	tcaggcagcc	cagggtctctg	9000
agaatcttgg	tgtaagggtc	aacattctat	tgagaaagaa	atgtatgcct	tggttttatc	9060
agattggatt	tgtgtataat	gtactaagac	ctaaaatgag	gctttcctgc	cataggcttg	9120
cctaaagtga	ggctctttct	tgtttgcttt	aagtagtgcg	cagccctggt	gggtttacac	9180
aaagctatag	tcactttaca	ggaagcgaag	ggcaactcta	atggcactcc	acaaagagga	9240
ctcaatcata	ataatatctt	tccacaaagc	atgtccaact	gtaat		

cactgcaacc	tctgcctcct	gggctcaagt	gatacctccca	ccttagtctc	cgagtagctg	9540
ggactacagg	tgcacatcac	catgcacctg	gctaattttt	gtaatttttg	tagagatggg	9600
gttttgccct	gttgcgcagg	ttgggtcttga	actcctgggc	tcaagcagtc	cgcccacctc	9660
agcatgagca	acagagcctg	gggcttggtt	taaagtgaga	gactctaggc	aggggtgtggt	9720
ggcttacgcc	tgtaatccca	gcactttggg	aggccaaggc	aggcggatga	cctgaggcca	9780
ggagttcgag	accaccctgg	ccaacatggc	gaaatcctgt	ctctactaaa	aatacaaaaa	9840
ttagctgggc	atggtggcac	atgcctatag	tcccagctac	ttggcagggt	gaggcaggag	9900
aatcgccga	acctgggaag	cacagatgtc	aatgagccga	gatacgacta	ctgcactcca	9960
gcctgggcaa	caagagcaaa	actcctgtct	caaaaaataa	taggtctggc	accatgggct	10020
cacgcctgta	atcccaccac	tttgggaggc	caggaagcgt	ggatcacctg	aggtcaggag	10080
ttcgagacca	gtctggccca	catggtgaaa	ccccatctct	actaaaaata	caaaaaatta	10140
gctggacgtg	gtggcgta	cctgtagtcc	cagctactca	ggaggctgag	acatgagaat	10200
cacttgaact	agggaggcgg	aggttgca	gagccgagat	agtgccagtg	cactccagcc	10260
tgggtgacag	agtgagactc	tgtctcaaaa	ataaaaataac	tctgtctcaa	aaatataaaa	10320
taaaataaaa	taagtgagag	actctaatag	atttctataa	agtgagggtt	agccatgctg	10380
gagtttgctc	caggtaaaat	tttaagactg	cttccatgaa	gtaaggttct	tccataatgg	10440
cattttggtta	acacctggac	agagggggat	ggtccatgcg	gacagtgc	ttgtgccctt	10500
accacttctt	gcccacacca	cttcttggcc	acagatctgg	cgcgactctt	tctctctctt	10560
gcatgcactt	aactttggca	ttgggtggtg	cggcacacag	catgtactgt	ggcggctgga	10620
gaatggggag	ctggaacaca	tccggcccaa	ggtgagcggg	gcttgggtgg	ggctctaaaa	10680
catcttttgg	ctgccccctc	accgctgctt	catgtctctt	tttccacaga	ttgtggtggt	10740
ctgggtgggc	accaacaacc	acggacacac	agcagagcag	gtgactggtg	gcatcaaggc	10800
cattgtgcaa	ctggtgaatg	agcgacagcc	ccaggcccgg	gttgtggtgc	tggtgagagg	10860
ctgggagagt	gggaaaggaa	gaatggcagt	ggtctgggac	cccctcagat	atagccacag	10920
ttggcacagt	tctaggcaga	ttgacataga	gcagtggctt	ttaggcagaa	tctcacgttg	10980
gagcttgcta	tacccttcag	agtggctgtg	gttgagaata	tgtccgaga	ccaattagcc	11040
ttttttgccc	agggatggct	taagactttg	ggggttattg	aaaaataaaa	aacggggcag	11100
gcacggtggc	tcacgcctgt	aatcccagca	ctttggggaga	ccgaggcagg	tggatcacga	11160
ggtcaggaga	tcaagaccat	cctggcta	acggtgaa	cccatttcta	ctaaaaatac	11220
aaaaaaaaat	tagccggg	tgggtggcgg	cacctgtagt	cccagcta	ttggcaggct	11280
gaggcaggag	aatggcatga	acctgggagg	cggagcttgc	agtaagctga	tactgtgcca	11340
ctgcactcca	gcctgggcga	cagagcgaga	ctccgtctca	aaaaaaaaaa	aattagttgg	11400
gcattgggtg	ggcgagctg	ctcatgcctg	taatcccagc	acttttgggag	gccgaggcaa	11460
gcagatcacc	tgaggtcggg	agttcaagc	cagcctgacc	acagctggag	aaactccatc	11520
tctactaaaa	atacaaaatt	agctgggcgt	ggtggcacat	gcctataatc	ccagctactt	11580
gggaggctaa	ggcaggagaa	tcgcttga	ccaggagggtg	gaggttgggg	tgagccaaga	11640
ttgcaccatt	gcactccagc	ctgggcaaca	ggagcgaa	tctgtctcaa	aaaaaaaaaa	11700
aagccgggtg	cggtggctca	cgctgtaaa	cttgtaatcc	cagcactttg	ggaggctgaa	11760
gaggggtgat	cacaaagtca	ggagatcgag	accatcctgg	ctaacaaggt	gaaaccccg	11820
ttctactaaa	aatacaaaaa	attagccggg	cgtggtggca	ggcgtctgta	gtcccagcta	11880
cttgggaggc	tgaggcagga	gaatggcatg	aacccggggg	gcggagcttg	cagtgagccg	11940
agatttgccc	actgcactcc	agcctgggca	acagagcaag	actccatctc	aaaaaaaaaa	12000
agaattagct	gggtatgatg	gtgcgcaaaa	ctgtaa	cagctacttg	ggaggctaaa	12060
ggagaaggat	cacttgagcc	caggaattca	aggtaacagt	gagctgtgat	catgctactg	12120
cactctcgcc	cgggtgacag	agaccctgtc	tcaccagaaa	acaaaagaaa	aaccctcaaa	12180
aaaccttgaa	taggccaaaa	gttgtcaggc	attcctgggg	taaattctagg	ctccatcact	12240
tgtaggtagc	taggatattt	cctcttctga	aaacggattg	atcccttggc	atgagccatg	12300
atgttgatat	cttttattta	tttattttatt	ttgggacaga	gtcttgctct	gttgccaggc	12360
cagagtgcag	tgacgcaatc	tggcctcact	gcaacctcct	cctcctgggt	tcaagtgatt	12420
ctcctgctc	agccttcaga	gtagctgaga	ctgcaggcgc	gtgccaccac	acctggctaa	12480
tttttgtatt	tttagtagag	atggcathtt	accatgttgg	cggggctggc	ctcaactcc	12540
tgacctcaag	tgatccaccc	gtctcagcct	cccaaagtgc	tgggattaca	ggcgtgagca	12600
acctcccttg	gcctattttat	tttttgagac	aggatctggc	tctgttgccc	aggctggagt	12660
gcggtggcat	gatctcagct	cactgcaact	tctgcttcca	gggctcaagt	gattctccca	12720
cgtcagcctc	ccgagtagct	gggactacag	gcacacgcca	tcatgtccca	ctaatttttg	12780
tgtatttttg	ttagagatgg	ggtttcacca	tgttgcccag	gttgggtctcg	aactcctggg	12840
ctcaagcgac	ctatccagct	ctgcctccca	tcatgctggg	attacaggcg	tgagccactg	12900

gaatggcgtg	aacctgggag	gctggagcttg	cagtgaagtgc	agatcgcgcc	actgcactcc	13200
agtctgggag	acagagcaag	actctgtctc	aaaaaaaaa	aaaaaagaaa	acgaaagagg	13260
gtaaaaccca	gaagtctctt	gctaaatgag	ggctaggatg	tgatatttag	gaactaccct	13320
cccaccctcc	ccacttgccc	atccctagtg	ttttctgcag	ctggaaactt	catggtggtg	13380
ggtggaggac	agggtggcac	agagaacaag	atactcaa	gcttgtttcc	ttactacgcc	13440
tcgtgttctt	gctcagggcc	tgcttccgag	aggccaacat	cccaaccac	ttcggggagaa	13500
gaaccgacag	gtgaacgagc	tggtacgggc	ggcactggct	ggccaccctc	gggcccactt	13560
cctagatgcc	gaccctggct	ttgtgcactc	agatggcacc	atcagccatc	atgacatgta	13620
tgattacctg	catctgagcc	gcctgggcta	cacacctgtt	tgccgggctc	tgactccctt	13680
gcttctgcgt	ctgctggccc	aagaccaggg	ccaaggtgct	cccctgctgg	agcccgcacc	13740
ctaagcatcc	tgctgccttc	ccacaacatt	aaactctcct	tcctcagtgc		13789

<210> 5353

<211> 3500

<212> DNA

<213> Homo sapiens

<400> 5353

cacacaggtg	tgtaaacag	ctttaatctc	gctcattgag	gcttctcggc	acagtaagaa	60
atattgcaca	tgatcaacat	gtttgttctt	ggggaagggg	gcaagggcag	ggggaatcac	120
cttcttagaa	agtacaaccc	aagtggggag	ggcagagggg	gtgaggagaa	aaccctcccc	180
gtgcctgtgg	caaagtgcag	gagccccac	ccccaaacta	acctgagtc	agccccctctg	240
gggaaaaaag	gggtgcatga	actcccccta	ttccacaggc	gcctccctgt	ggcccaaggc	300
ctgcaccacc	ctccagcttg	cagccctcac	aggagccatt	ttgcataaag	tgaaaagctc	360
tgaaggtcac	acgctccagg	ttatgtacag	gggcttgagg	gaggagagact	gccccctgcag	420
ccccctcagct	gccccccagc	accggggagg	agcttcgagg	gaagggggta	tttacaagag	480
gagcaggcct	cattccgccc	caaactggag	aggacgaaat	ggctttaccc	gggaggagat	540
aaccttctctg	ccccacata	ctgtccatgt	cctgaggggg	tactataagt	cctggcatct	600
tctcaggggt	ccctcacctg	cctgtggcag	ctgtggaggg	acctgggggt	gggggggagg	660
gctgggggagc	cccctcccag	ccaggctgtc	caggccccga	ctctgggggt	ggaggcagtg	720
gcggggcagc	ctggggccgtg	ccagagtcgc	agctgggtga	ggtgggggtca	gggccccctg	780
cggggctggg	agtgggggca	ggggcagcag	cggtgccagt	ggggggcggt	acagggagag	840
gagcctcagc	tccagggggc	tgctccgtgg	gagtggcagc	ctgcatgac	ttctggcgca	900
cctcacggat	cttcaactgc	agacaaacct	tggagggaaa	gatgtctgca	tagcgggcct	960
ggaaggcggc	tgtggcctgg	gctggagata	gaaaaacggt	ggggagcaca	ggatgagatg	1020
tacagataag	tcccacccga	gtgaccccaa	gactccgaga	caggctcacc	tgacgggaag	1080
aagccatggt	cctgaaagag	ctgcatgacc	agggcccggc	gctgggtccag	ggtgcgccgc	1140
agggaggagt	atggcacctt	gtcatactct	agctccccaa	gcacgtcctc	ggcttctgta	1200
cctgtgcagg	gcacaggcag	catggcaagg	ctgcagcagc	ggcagggcct	tcctgccacc	1260
gtctgagtgc	ccacccaagc	cctcactgca	ttctatttca	caggggagtc	agagaggggt	1320
ctgcccaca	gtcacagggc	aacctagggg	cctgccagac	tccagaacct	accactgaca	1380
ggctgtgctt	ctctccagcc	tggatggacc	cacctactct	ctctcactct	ctaaccgcct	1440
tccagagacc	cactcctctt	gcagggtccc	aggcccccaa	agttctgccc	accacggcac	1500
ctgtacggtc	aaagggtgaag	atgtccccct	cgcacttggc	actcttgggg	gtgttgggct	1560
ccgagctgca	gctggagcgt	cttctcatct	tgcgcttggg	cgaggtgggg	tcctcgggtg	1620
ctgaatccag	gtctggccaa	acagaagcag	actcagtgc	ggtggcccca	gtctgccctc	1680
cacctaaagga	ccctgggtgc	ccaatgctcg	cctaccctg	gagttcttcc	tcttcttgcg	1740
gtaagagccc	aggatggccc	ggggtgaggt	ggccagagac	tgacgggtgg	gggagggcag	1800
cactctctca	ggccgaaact	caggcaactc	agcaaaagcg	tcttcgaagt	ccacttctga	1860
caggaccctg	ctggaggggc	ggcagggtca	cctccccgc	ctcagcctgc	agctgctccc	1920
actcccgcca	ccctaaccag	ctccaccaag	gccccagccc	atgctcactt	gtccacagag	1980
tcaaaggctt	tcttcagggg	cgggggccgc	accttcacct	tcttgccagt	accagccgcc	2040
tccttgcgct	ccgggggtgtc	cccggctgcc	cgccactgc	tgctctcgct	gctgccacca	2100
ggggctacag	ctggagctgg	ggccgggctg	ggaggagtgg	gaggctccc	acgattctcc	2160
aggccctgcc	cagggacgcg	ccagtctgaa	gatgagctgg	ggaatttgct	ggcctgggggt	2220
ggagatgggc	agggagatgg	cgaacactga	gctcagactc	tggggcaaag	gccagaaaca	2280
aagagttgga	tctgagcccc	cccagcagac	cccttgagaa	ggctgtcaca	cggcctcagg	2340
aaggccaaga	cagggggcctc	agatggggag	ggagacaaca	caggcaggca	gaagggacag	2400
aggggacctt	ttaacctgag	agacacacag	gcatggaaag	aagagtagga	cagaaaagca	2460
aagacgtcaa	tggagaggca	cagccaagtgc	gcagtggggag	ccccacggcc	tgcaggcgct	2520

<400> 5355

gttaggcca	ggggaat	gtttggagag	atggcccagc	tggcagtagg	aggaccagag	60
aaagatacca	tctgtgaact	gtgtggggag	tcacatccat	acccgggtgac	ctatcacatg	120
agacaagctc	acccaggtaa	atgatactgt	tgaatgtacg	tataagtgtc	tttttcttta	180
atgaaccaga	tcactttatt	tgagctgttc	tatgaatttt	gtcaaaggat	aggggaattta	240
tagtatctta	gaatgtcatt	tttaaagtac	attatcagta	cagggttttg	tgaaaaacag	300
ataaattcta	atattatgat	ggccagggtca	tttagtgcta	tttcactttc	atgtagcata	360
ttttaaaaaa	tattatgtgt	tacccaaagg	gtgtgccatt	aatgtgtctg	tctcacacag	420
cagaaacagt	ggcatgcca	tacacacagg	gcctctcctt	tgattttact	atcttcctgt	480
tcagaattgc	aaattaaatt	agatttagatt	gatttctata	ggctttttcc	tacggaagtg	540
atattgtttt	atcagaagac	tgcattttca	gtaaatgtaa	tgatttctgt	aacattgact	600
aatattccaa	attcacctaa	tacaaaattg	gttaattttt	ttctttgtct	acatattata	660
cctcaaattg	cttatgaata	tgtgatttct	gaaaatatat	cattgttata	gaacttttat	720
acttgtattg	tctaatttta	ttgacataat	taagtataat	taaatatacc	tatattctat	780
ctctctttta	atatgctga	ttagaaacta	agtatctctc	atatttgggg	catcatttaa	840
ttgatgcttt	tttgatcaag	taagctattt	ttctgatata	gttaatagcc	tgaaaaataa	900
gatatctact	tcagtatnt	gctttctttg	agaaggtaaa	tctgtcatta	atgtatgagt	960
aataaggatc	aaactattaa	ggacacttgg	agtgttaa	atattttttt	ggatttgttt	1020
caagggtgtg	gccgatatgc	tgggtggaca	ggttacaata	gcattgggca	tttttgtgga	1080
ggatgggctg	gtaactgtgg	tgatggtggc	ataggaggaa	gcacttggta	tctggtatgt	1140
gatcgtctga	gagaaaaata	cctccgcgaa	aaacaggctg	ctgcaagg		1188

<210> 5356

<211> 1668

<212> DNA

<213> Homo sapiens

<400> 5356

gtttaagaaa	atgtttggat	ggggcgattt	tcattccaac	atcaaaacag	tgaagctgaa	60
cctgttgata	actgggaaaa	ttgtagatca	tggcaatggg	acatttagtg	tttatttcag	120
gcataattca	actgggtcaag	ggaatgtatc	tgtcagcttg	gtacccctta	caaaaatcgt	180
ggaatttgac	ttggcacaac	aaaccgtgat	tgatgccaaa	gattccaagt	cttttaattg	240
tcgcattgaa	tatgaaaagg	ttgacaaggc	taccaagaac	acactctgca	actatgaccc	300
ttcaaaaacc	tgttaccagg	agcaaaccca	aagtcagtga	tcctggctct	gctccaagcc	360
ctttaagggtg	atctgtattt	acatttcctt	ttatagtaca	gattataaac	tggtacagaa	420
agtgtgccct	gactacaact	accacagtga	cacaccttac	ttccctcgg	gatgaagggtg	480
aacatggggg	tgagactgaa	gcctgaggaa	ttaaagggtca	tatgacaggg	ctgttacctc	540
aaagaagaag	gtcacatctg	ttgcctggaa	tgtgtctaca	ctgctgctct	tgtcaactgg	600
ctgcaaaata	cactagtggg	aaacactctg	atgtaatttc	tgcccagtca	gcttcacccc	660
tcagtataat	tgtaaatcat	cacagatttt	gaattcacac	ctgaagacat	gctctcacat	720
atagaggtag	acaaacacac	cgtcatgcac	atttcagctt	gcgtctatca	tgattcctgt	780
tgagagggct	ttcattgtct	gactcataat	ggttcaggat	caactatcat	caaacggaag	840
gattaactag	acagagaatg	tttctaacag	ttgctgttat	ggaaatctct	tttaaagtct	900
tgagtacatg	ctaatacaata	atctccactc	atgcattcct	actgcttgga	gtagctgtac	960
tggtaaatac	tactgtagga	gtatctgctt	gttaaaatgg	aaaaatgtgt	cttttagagct	1020
cagtattctt	tatttttaca	acacaacaaa	atgtagtaac	ttttttccag	catacagtag	1080
gcacattcaa	agtgggtcca	gatggctctt	ttttctttga	aaggggcctg	ttctcagtaa	1140
agatgagcaa	acatttggaa	tttacaatgtg	ggcagacatt	gggataacaa	ctttcatcac	1200
caatcatttg	acttttggga	agttgacacc	agctaaggct	gcttaaaata	agttctgac	1260
attatataag	aaggggaatg	cctggcagac	accatgtaag	ttataagtgt	ctgtcttatc	1320
tttactacac	atattgtaac	aaattcaata	tcctagtctt	catttgtatg	aatggtttgt	1380
attgtacata	gtttaaccaa	gtgttatattg	agctgcttat	taataattaac	ttgtacttgt	1440
ctctctgctt	gttattgggt	aagaaaaaag	gatatgagga	attcatttta	tcaatgtagc	1500
tgtgaaggcc	attaaaaaga	caaacttaat	gtacagagca	tttattcaga	tcaagtattg	1560
ttgaaagcta	tacatatata	acattacagt	ctgtctgtat	ttagatattt	tatttctgga	1620
aaaaatgaaa	tgtacataaa	aataaaacac	ttaaagttag	gtttcaat		1668

<210> 5357

<211> 13422
 <212> DNA
 <213> Homo sapiens

<400> 5357

cagtgtgatg	cgggtgagtgt	cctgggagaag	gagcacgatt	acagggatga	gcatttggac	60
tttatccagt	cacacctgcg	gaggttctgc	cttcagtgtg	tcctttgggc	gctgtgtggg	120
gcctgggtca	caggctttct	tccaaatggg	gcctcttcaa	agagataaag	cacctcccaa	180
accagaata	gtgttctgcc	aaagagaatt	tgtatatatc	tttttactag	gtttatgttt	240
tactgtatcg	gagtttttag	tttattaact	tgtgtctacc	tttgatcact	catttatattg	300
tttgtttgtt	tgtttgtttt	aagatggtgt	ttcaccactt	tggccaggct	agtctcaa	360
tcctgacctc	aagtgatcac	ctacctcagc	ctccgaaagt	gctgggatta	tagctgttag	420
ctactgcgct	cggcgatatt	tttaattttt	tttctgagac	agagtctgct	ctgtcaccca	480
ggctggagta	cagtgggtgca	gtcttagctc	ttgtgtctct	gggttcaagc	aatcctcctc	540
cctcagcctc	ctgagtacct	gggacaacag	gtgtgcgcca	ccacttccag	atttttgttt	600
gtttgttttg	agacagagct	tcactcttgt	cgctcaggct	ggagtacagt	ggcatgatct	660
cggctcactg	caacctccac	ctcctatggt	caagcgaccc	tcctgcctca	gcctcccaag	720
tagctgggat	tacaggcatg	agccaccaca	cccggctagt	ttttgtattt	ttagtagaga	780
acagggtttc	accatgttgg	ccaggctagt	ctcgaactcc	tgacctcatg	tgatccaccc	840
acctcgccc	cctcaaagtt	ctgggattac	aggcgcgagc	caccatgcct	ggccatctgg	900
ataatttttg	tatttttagt	agagacggtt	tcagcatggt	ggccaggcta	ttctcgaatt	960
cctgacctca	agtaatctgc	cctccttggc	ctcccaaagt	ggtgggatta	caggcgtgag	1020
ccactgtgtc	tgccccacttt	taattaatgc	tatacatttg	ataagctttc	ctattaagaa	1080
tttaatgtga	tcatttttatc	atcaaattac	ttttatcata	ctgtcttaga	aataatttta	1140
aactttgtct	ttatgtagaa	aagggtcaatt	accaaacagg	gtattgtttt	ataggctact	1200
gggtgtttccc	atatgtttat	gttttgtgct	gtccatgata	gagagggtgt	gtctgtagtc	1260
ttttgagtcc	tgtttaactat	aaaaagccaa	tagcagttgg	tgccgtgggt	ccacaccctg	1320
gggtggaggt	gagagatgag	ttcctgccat	cttttttggg	atggcccatt	agcctgttgg	1380
cacccatccc	tcaaaagatg	ggtttaatga	taaatttggg	cgcatgtagg	catctgtctg	1440
ggaaggaatc	tgtgtacctt	gatactctga	gagtgttttc	ctgggctaac	ctcagagcca	1500
atactttact	tctcaggaag	taatctgtgg	gatcaagaca	acaattttaca	cgttaaaaaa	1560
taaactctac	agcccactag	catcaacata	gctttatgct	tttgacttca	ttcatctgct	1620
actatgacct	ttttactttt	ttattttattt	atttattttt	accagtgtgc	agtatgccta	1680
tgtaatacta	taagcgtttt	agttttttaa	attgtaatgc	tttctgttgc	tcataatttg	1740
atcaaaaact	gatcaacctt	tgagtagtac	tttgaggttg	tatgtgttcg	attttgtctc	1800
ctcctgcagt	gaattgattt	ttcttgagca	gattgattag	atggagctgc	cttgattttac	1860
acatcagtga	aagaagagaa	aaacctcgac	ttgttgtata	agtatatgtt	tcataaaaca	1920
tacggtttcc	acttcaccac	acctgcctta	gttggtgaaa	aggatgccgt	ttttatgtga	1980
gttattttga	gctgatgctt	tgaaactcct	cttttttaaag	tacatttgct	ttttacattt	2040
tacccttcca	aggaaggtgc	cttctgtctg	tgtcttctac	agccagctct	ctcactgcac	2100
cttctctctg	ttcctttccg	gattatgagg	catctgcctg	aggggaagtgg	gtgggtgtgg	2160
caggggtgct	gcctttcttc	ctcgagagca	agttgccaaa	acctaagcca	gccatttttg	2220
gcactcactg	tcaactcttg	taaaatactg	gctggggagg	gaatataggg	aatttgtctt	2280
gggggatcct	tattgtcttc	gaatgaagcg	cctgttttat	ctgtgtgttg	gcagggatga	2340
ctgcaaacat	cctctcggca	tctctgtcag	catgggcttt	cgctatatta	agtgtctact	2400
gtgcttcttg	catttcacat	tttgggagcc	accgggattg	attgtcctcg	atagagactt	2460
ggatacctgt	tttctaagc	tgggtgtctt	ctctcactgg	agaatcatag	tggtgctgga	2520
tgcataaata	tgaagctgtg	gtctctgaca	agacttgtgt	tagcagattg	atgttcaggc	2580
ttcagtatcc	tcctgactta	acaaacaatt	acattattca	ttcaggaaac	cttattcagc	2640
accactagg	tgctcagggt	ctctgcaaag	gacacagaaa	tgaatgatac	gtgttccttg	2700
catatggcac	tgtctagagg	ggacatacac	agctgaagaa	gggaagggca	gtgatgggg	2760
tatggaggaa	gtatggcagg	gaaagcagga	gggtgatgct	ggaagacaaa	tggtagatcc	2820
caggcggaact	gaaataggaat	gcaatagggg	gagccgggga	gtgcagctcg	tgagaggctg	2880
gaaatgtgaa	agccaggagc	tctcagggat	ttgggttgcc	tcctgcacag	tcaaggagag	2940
tgtcactcag	gctagtcata	gatggcatac	ctacaggctt	gggctgattt	tagatagttg	3000
ttcagagcag	tcaggcaggc	gccagaggca	caagccctgt	gagagggtgtg	tttggaatca	3060
cttggtatcc	aaatcacatg	tcatccctag	gagcaaggag	accggttgga	tttggggctg	3120
gtctggaatg	aagaagcatc	tctcagcttc	cgaaggctgc	atggctcacg	gcagtatctc	3180
aatcatgccc	tgcccgtttg	cacattttgt	cctgttggtg	gttacctctc	tggtgactgg	3240
caaagtcagc	aaggatattg	gggtggagca	ccctggctaa	gcacctctt	gattatagag	3300
ctatggagta	gaagacagat	ggagaatgag	aggcctgtga	gaacaatcag	tcagttgcca	3360

tctttcagag	ctgctcgagt	tcaaaagtgt	gtcatacagg	gtattttacc	attgctacct	3420
ttaagggatt	caggtgggaa	ccctaggctg	tggcttcaca	taatggaact	tgggtgccat	3480
cctaccctgt	gatgttgagc	tggccagcac	tgggtgtagga	acctcaagga	ctctgtgctt	3540
ctctggtttg	gggcctagga	taaacacagg	ccctgcttgc	cccttgggtc	taggacacat	3600
cttcccatgc	cagcaaagtt	aatgaaccag	tctacaagat	aactgttgaa	agaattctta	3660
gagaaacaac	ccacaggagg	ggagccatgt	cagagcccaa	gaaaaccatc	ccatcctgag	3720
ctctgccttc	tgtgtgctc	tctgcacatc	attctctgtc	ggaacaggac	cccactgtgt	3780
ccttgctctt	ctaggcagag	ttgtgggaga	gtgctaaatg	cttttgagtg	gggcagcctg	3840
tggaatggga	tctcactactg	gctccttaga	ccttgggccc	atgaactcag	tatggagcag	3900
gacctgcgat	gttctgatgg	attataccca	cagtgtatct	tggcacatct	gccaaaagct	3960
acaaacaacc	cccaacaact	acacactata	tcttgtgaga	agtgtcctac	ccaggagtcc	4020
tgaatgtgat	ctgagtatgc	tctaaggcag	ccccaggaaa	agcaattcag	tccctctctc	4080
tttgcccttta	gacctgcagg	ctggggacaat	gaaaagaaaa	tagctatctt	acatgaaaat	4140
tttacaaccg	tgaagcggga	agatgcatat	gaagacttta	ttgtgaaacc	tcccgtgaga	4200
aaggtagtca	aagacaattg	ctttaagggt	ttagggccgg	gcgcggtggc	tgatgcctgt	4260
aatcccagca	ctttgggagg	ccaaagcggg	cagatcacat	gaggtcagga	gtttgagacc	4320
agcctggcga	acatggcaaa	accccatctc	cactaaaaata	caaaaattag	ctgggtatgg	4380
tggcaagcgc	ctgtaatccc	agctacttgg	gaggctgagg	catgagaatc	acttgaacct	4440
gggaggcaga	gattgcagtg	aaccagatt	gcgccactgc	actccaacct	ggcaacagag	4500
tgagactcca	tatcaaaaaa	agaaaagaag	aaaaagggtt	taggtgtttt	ttaatgcaaa	4560
aagaagccta	taaagatggg	gcgtggtggc	tgattcctgt	aatcccagca	gttgggaggc	4620
tgaggcagga	gaattgcttg	aacctgggag	gcggagggtg	taatgagccg	agatcggggc	4680
actgtactcc	agcctgggtg	acaagagcga	gactccatct	caaaaaaaaa	aaaaaaaaaa	4740
aaactataaa	gaaacaggtc	ttacacattg	tatagtttgt	ggggggtagt	ggggagtagt	4800
aagtcaccag	gcctttttgt	tgacttttaa	atgaggtctg	gcgttatgta	aatggctcag	4860
ggctgggtgg	aaggagtgat	ggaatgctca	cctggagtgt	gtgggtgttc	ccattaagtc	4920
ctgccagtgc	tgccgttgcc	tctggattac	tgttactgga	tcccctcatg	tgatgtcctg	4980
cagaccctga	ggtgttttaga	acctgccaga	cttaaaaaatg	ccagttggct	acatgctgcg	5040
gctggttttg	ggagaggtct	gtgccaggct	agaaaaatat	tactctgcag	tctcagtagg	5100
gatctcccag	acctgtgttg	aagcctgagc	ctcggactct	cctttcggca	tgaagtttga	5160
cagtggtttag	gagtattctt	ggcctgtggc	cacaaacatg	tatgttgttt	cacagctggg	5220
ccacgacaaa	gagttggcag	cagaagatga	gcaggtgttc	ctaatgaagc	aacaggtaag	5280
aagaccagtg	aggttagaac	agaggccttc	tcatgcatga	aatgccagtc	cctaggggtg	5340
ggttgggggg	gtctgcattg	gggaagtcac	aaagagcttg	cagtggtaga	gggggttgaga	5400
ccaggtctcc	tcatctccctc	cttattttcta	ggattagttg	gggatggacc	acctccttag	5460
gagatcacct	acctgccttg	cagactctcc	tacaggaata	gtaggattcg	catcttttaa	5520
gtgctctttc	tttggaaatg	tggttttctg	gcataatact	tcctatgttg	acagttaacc	5580
aagtaacctg	accacacttc	cattattttca	tgtagcctca	cacagccctg	tacataaagg	5640
caggtgatgc	ctgttttgca	gatgaggaga	gtaacttccc	caagctgaca	gtttagaatg	5700
cagacttccc	atcttctgtca	cccagattat	tgttagatgt	gtcctgggtc	cacctatcat	5760
ctgcccagtg	gtacaggcag	gtcagcagga	agttttgatg	gttctttttc	caactgtttc	5820
cttctttttc	catctttttc	cttctgtctc	tttgtgtgtc	tccttagctt	caaaactggg	5880
tacttggagt	attttttttc	acctataacc	aaacggctca	attaaaattt	tttggcatct	5940
gtgggtataaa	acataggact	tagttgttgt	taatagtgcc	ctctagtgga	gtacttggag	6000
taagtttttc	tctagacctt	cagtgtcttc	tgcaggcctt	ggttaatagc	cagtttgtcc	6060
ctctcttttg	agtcactcct	tgccaagcaa	ccagccactc	ccacgagagc	ttctgtgagt	6120
accttacact	aaacagaggg	tcaaggccca	gtgttggtgg	tgtcatcaaa	ctttatacca	6180
ttattttgtga	gagcgtatat	ttgtgtgggt	tttgtatttt	cagtgggaat	ttggttttcc	6240
taaagacca	tgaccagaaa	cataaaagaa	actcaagaag	tttctgatga	aagaatacaa	6300
ctctgggaat	tagagtgagc	tggcttttgt	atctggatgt	ctttctctca	ggagaaagag	6360
agccagaaag	ggcttgaatt	gagagcatic	tcccagtcct	gtaccatagc	ctgtgaaaaa	6420
tatccctcag	aagcatgtct	ccatttgtgg	catatgtatt	ttttgttatt	gttatgcctg	6480
tgtgtgacct	tagctgcttt	tggacttagg	aatctcctgc	aagaggacc	tctggctctc	6540
caaggacca	gggtcgggga	gggccagcca	gtgtgcctag	ctcctcccca	ggcacgtcag	6600
taaaaaagcc	ggacccaaac	atcaaaagta	tgtattcctc	aaaagtatgt	ctctttggag	6660
agtagtttag	tttttagacct	gagccctgca	ggggctgggt	ggctgagctc	ataaggtgga	6720
gactcatgga	agccaggcta	ttctcttccc	cgataagggc	tactttccat	ttccccatt	6780
ccagaggaag	aaggtccatg	gtaggcagag	accagggcct	gttcctttgt	tagaattggg	6840
agcccatgca	cctggctctg	tgtgagacct	cacttagggc	ctgctcattc	cttcagagag	6900
gaatgcaaaa	tagtaacttt	attttttttag	agacagggtc	tcactctgtc	accagcctg	6960
tggcacagtg	atacatcat	agcacactgc	agcctcaaac	tcctgggctc	aagtgatcct	7020

cccatgtcaa	ctctggagta	gctgggacta	taggcgtgtg	ccaccatgcc	cagctaattt	7080
ttaaaatttt	tattgtaggc	cagatgcagt	ggctcatgcc	tataatccta	gtactctggg	7140
aggccaaggt	gggaggatag	cttgagctaa	agagtctgag	actagcccgg	gcaacatagt	7200
gagacctcgc	ctctacagaa	tattgaaaaa	ttagctgggc	atgatgggtg	ttgcctgtag	7260
tcccatctac	tcaagtggat	gaagcggcag	gattgcttgg	gcccagggca	ttgaggctgc	7320
agttgagctg	tgattatgcc	accatgctcc	agccaggggtg	acagagttag	agactgtttc	7380
aaaaaaaaaa	aggcctggcg	tggtgactca	agccagcact	ttgggagggt	gaggcgggca	7440
gatcacttga	gggcaggagt	ttgagaccag	cctggccaac	atggtgaaac	cttctctgta	7500
caaaaattag	ccaggcgtga	tggtgggcac	ctgtaatccc	agctactcgg	gaggcagagg	7560
caggagaacg	gcttaatcct	gggagggtgga	ggttgcagtg	agccgagatt	gtgccattgc	7620
actccagcct	gggtgacaga	gcaagactcc	atttcaaaaa	aacacaaaca	aaaatatattt	7680
ttatagaggt	aggggtctca	cttacgttgc	cgaggctgat	ctcaagctcc	tagcctcaag	7740
cagtccctacg	cccttggtct	ccccaaagtga	tgggattaca	ggcgtgagcc	accacccctg	7800
gctgaggggag	tcactttaaa	atgtgtatatt	tgaatctgta	actttgtttc	tcattatggt	7860
tatatgatga	ctgtctatga	attgtgggga	tttttcccc	ttcacttctc	ttgtcaagct	7920
caattactttt	tcagattaag	tagcttttat	cccagtaact	tagtgatact	cacagatact	7980
gcctgcagta	aaatcattaa	aaaacagttt	tatttaatgc	ttgtttgatg	ggtgtcttct	8040
attcaggatg	tgagctttttc	acagcagggt	tggaaatgta	agtgtctcatg	caactttgaa	8100
aaacactgtc	tcatggacgg	ggagggtggg	tggagcacag	gttatctatt	ctgctcccaa	8160
acaagtggga	aatgtaaaca	tggttccact	tagtaatcat	gctaagtagc	ctcagcagta	8220
gcagtgtaaa	ggcatcgtag	cgaatgaatg	ttatcaatat	cctaggaagc	tgatagccac	8280
aagtggctaa	tgccaagctg	agaactaggg	tgtttaattt	taagtcttcc	agtttatatg	8340
atgctttttt	ttctctttta	ttttccttag	ataatgcagc	aagtgaaggg	gtgttggcca	8400
gcttcttcaa	cagtctgttg	agtaaaaaa	caggctctcc	tggaaatcct	ggtgctgggtg	8460
gggtgcagag	cacagccaag	aagtcaggta	cagaagggcc	ctggagactt	gtgactcttg	8520
tggttgagta	gtgctgcaag	gatggagagg	cagacacctg	ccctgcagac	cctgcagtgt	8580
cctgaatagc	caagcaaggga	agcaggctct	catttccctac	tgagcagtgt	gccgtgcttt	8640
cagtgggatt	gccttactac	catgcagggt	tccttggcac	attgagagtg	ggatttgtgt	8700
acatttgggt	tctcggaac	tggtgttgg	gtgagttgag	gtatagccta	aattacatat	8760
gtggccctgt	tgtagaacct	ctccagtaga	agtcatggtc	catggagggt	gtaccagtga	8820
cttttttttt	ctttttccaa	ggtggagttt	tgctcttggt	gcccaggctg	gagtgcattg	8880
acgtgatctc	actgcaacct	ccgcctccca	ggttcaagcg	attctcctgt	ctcagcctcc	8940
cgagtagctg	ggattacagg	cgcgtgccat	catgcccagc	taattttttg	tatttttagt	9000
agagatgtgg	tttcatcatg	ttggccaggc	tggtcttgga	attcctgacc	ccagggtgatc	9060
cctccatctt	ggcctcccaa	agtgcctggga	ttacagggtg	gagccaccgt	ctgcggctga	9120
cttttttttt	ttttttgata	gagatggagt	cttgctctgt	cgcccaggct	ggagtacagt	9180
ggcatgatct	caactcactg	ccaacctcca	ccaccgggt	tcaagcaatt	ctcttgcttc	9240
agcctcccga	gtagctggga	ctacaggcac	gcgccaccac	atccggctaa	tttttttgta	9300
tttttagtag	agacgggttt	tgcctatggt	ggccaggctg	ttctcgaact	cctgacctca	9360
ggtgatccac	ctgccttggc	ctcccaaagt	gctgggatta	gtgcacctgg	cctactttta	9420
atttttttaa	attatactaa	agccttagtt	gttctgaacc	agtgatgttt	tatttgttct	9480
attttttttt	ctgtgatgct	ttgtaaggat	tttgtttac	tccactgccc	ccagtttggc	9540
tgtgaacctc	cactgtctca	ctgcagatgc	aaggcctcct	cctccctgaa	gctccctact	9600
tgtcacatac	acacctctgt	ggcagccacc	cacctgtcct	tccatgtaag	caggtagggc	9660
gggtctatgt	cttgagatc	tctgaaacaa	aacaaaacat	gttttccctg	ggaattacac	9720
atttttccaa	gaagctggag	gacattttta	ggggtttttg	ctttccattt	tccattggct	9780
ataagggtatg	tttatacatt	gttttcccta	attgatgtct	tcagggcaga	ggagaccctc	9840
aggaaatcac	ttggggcagc	ctgggcctcc	agtggctcct	atgttctaag	aaactcagag	9900
tctggtctag	tggcccagac	tctgggctgg	tagtattccc	ttctgggaaa	taggtgtcta	9960
tttctatggc	tgttcgtgtc	tgacagcaga	aaaatacaag	tatagatttt	gtgcaggact	10020
gaactatctt	attcttattg	aaacataatg	ttttcaggct	atccatttga	gtcagtctag	10080
aatgttataa	acaaaaacac	ctatctgggg	caaagaaaat	agtttccttc	gttgctgaaa	10140
ttcagggtact	acctctagga	agatggtggt	gagagtgcac	aggggtcagg	gttgggtgggt	10200
gagaggggtt	tcagaaagggt	tcttgtatatt	ggcaciaaagg	cacccccgc	cagagagcag	10260
tcaagtcact	cccttggagt	tggaggaagc	actggcctgt	gacttttggg	attaggatgt	10320
gccgagttgg	ggtctcctca	ccactgcagt	agaaaagggc	tttccctcatt	cttattaagg	10380
ttactgtcat	caagtgatta	tagaaggcgt	ataattttta	atgctccttt	aaaaaaaaatt	10440
gtttcctctt	ctcacatcat	tactttgctt	ttttgctttt	tttttttttc	aggacaaaag	10500
actgtgttgt	caaatgttca	ggaagaactg	gatagaatga	ctcgaaagcc	agactctatg	10560
gtaacaaact	cttcaacaga	aaatgaagcc	tgaacctcct	taaaaagtgc	atatgtcgaa	10620
tgaccaaata	actatgtata	ttgatctgct	aagaccaggga	tttttctgat	atggcacatg	10680

ctatcagttt	tttggggcag	gggagatgaa	ctttaaaaaa	aaaaaaaaaa	cttcattggc	10740
ttgtccgagt	gtgaaatgca	catttaggaa	ggttacatgt	cagacccttt	gttaaggata	10800
acccttggac	tctggggcat	gtggctcttt	tgtgggaggc	aagcacatct	gggcttcttg	10860
tggaggggaa	ggtagagtga	aagaaagagg	gccactttc	taacaggggtg	gagcaaataga	10920
gaccaagaaa	tcattggtaa	gatgatgggt	agtctgacca	gtttcatgtt	agtaaattca	10980
cttggtcttg	ggaagcagat	taagtagcag	aaagtccagg	aaagaaagac	cagaaggagt	11040
aatgagacaa	gtgatgggtg	ggaagctgaa	tgttgaggga	ggtaggagaa	ggaggagatg	11100
agcagtgtca	gtaaatactg	tgcattcagt	agaagttgaa	gaatcattgt	tagaagcatt	11160
tccaaacaaa	acactaagca	aaatgggaat	taggcttatt	ttgaatgcat	ctttaactta	11220
cgaaagatgt	actaattgtg	ggggtgcctg	agtcaggcgg	agctgaccca	ggggtgggaa	11280
cgatggcagc	tgcccaggac	ccatgtgctt	ggcccaggct	atgtcctcgt	gagagggtact	11340
ggggtccacg	gatatgtgtt	gtggggcaga	cagtcactgt	gggatgtctt	caaagtcagc	11400
agttacagaa	ttagttttact	ttgaattttg	ttgtctaaat	agctcctgct	ttatttttta	11460
aattaaattt	tttgttttta	ctatcacagg	ctggcctaac	taatacaaaa	taggtgatga	11520
acctctgggt	ttaccataat	gcaatgtgcc	acggaaagtt	tgggggaggt	ttttaatgta	11580
attgcactct	ggttaattgg	ctcgtaccaa	gccctgcctt	atgacttgtg	gaaagcttca	11640
aggagttcca	ctgatgcaaa	agggtctttt	cctagcttcc	tgggtctgatc	agtgtctatga	11700
gatggacaga	taagtgtgaa	tgtttttatac	agaaaatgga	aatgatacat	ttctcttggt	11760
agggtgtttt	ataaaatgta	gcattttttt	tcttatggaa	ataagagttt	cagggtgtctc	11820
cccacctagg	gcaaattcat	gcacattgtc	atgtttatacc	accattcttg	aaatgatattc	11880
tgtggatttg	aaattgcact	tttaatttta	tatatgacag	catttaaattg	caaacactac	11940
catgaattta	atgtataaaa	tgttgtcaaa	ccaagggaaa	aaaccacagt	tcaccatgtg	12000
gagtttactt	tttttatatg	aatgtttgtt	gtactgtgtc	taagcataac	ttccctaattg	12060
tcattacttt	tacataccag	atttgactga	ccactaatgt	agtactgggg	ataacttaat	12120
atcctatggt	gtgtcaagac	tctttgaaga	ctttcttgaa	ttgctttcgt	aaaggtctga	12180
acactgttaa	ggagaaagct	gagtatcaac	ttgcctttct	gatagaaatg	tttcttgtgc	12240
cagttttatt	gttgagatat	actatttttt	tcttttttta	attcagtttt	ttaaaaaac	12300
aaatgtattg	tggcttccag	ttaccagggt	gtctaggtaa	tgacagtaaa	ctgactgtag	12360
aatgataatt	gtggtatagt	gaccaataga	tgccaaacag	cttgtggcct	cactaaaggt	12420
ggggtcgcct	agtccccggg	agtaaaatga	gtgacctcag	aaacaagaat	tcctggaaag	12480
gcacatgccg	aagaggaata	tgggtataatt	ttaaatttta	atgcaaaatt	ttaattttgtc	12540
tttatttttt	atcattttgaa	ctgataagca	ctttttgtgt	caatataaaa	tataactaaa	12600
ctgatgaaat	gctaagacat	gtccttgtgaa	ggaaggtttc	ttggagacca	cttttatttta	12660
ctcatgagaa	gtggaagctc	ctagtatcag	aagaagctga	tacatagtgt	catgtgctca	12720
gtggttgcca	aagtctacca	actttgggga	gctgcagggt	tctttttggg	aggtgggagg	12780
aaggagagatg	agttttgtta	ttttgggggt	ttcaagcatt	ggaaccaaag	gccaaataat	12840
aaacagcctt	tagtttttaa	agtaaaattc	attttatttg	cagagtacac	ttgtatggta	12900
gactgttaaa	gacaatttta	tgactattta	tgacatttat	aatgggtaca	tctgcttttt	12960
gtcttttaaa	taaaaaaaaa	aatcagagaa	aagcccacct	ttgaatacgt	ggctgaagat	13020
aacagccaag	aattgggtctt	tcctaaaaat	gcaacagata	atgctgctag	attgttattt	13080
tgtttgcact	tttttttgat	tggcattttta	aaatcggtat	ttaaactgaa	gacattgtca	13140
tgttttatta	atttaacaaa	gttgaaagtg	actgctctgt	acatcatgac	cttaacaatg	13200
ttaatgctgt	aagtgaaggt	tcactgtcgt	ctgtatacta	aatttattgg	tgtttctaac	13260
ttaaaagtaa	gactgcagat	tatcccccac	cagccttagt	ccaggggtgt	ggctctgtcc	13320
gggtgcagta	tgcatgcatg	tggaaaccttg	ctttctagtc	ctgggaaaaa	aagatgtctc	13380
taattactgg	cttcaataaa	cacgaatcca	gactgcttac	aa		13422

<210> 5358
 <211> 102
 <212> DNA
 <213> Homo sapiens

<400> 5358						
tttctttttt	ttttctttcc	tttttttttt	tttttttgag	acagtcttgc	tctgttgccc	60
aggctggagt	gcaatgggtgc	aatctcagct	cactgtaacc	tc		102

<210> 5359
 <211> 779
 <212> DNA

<213> Homo sapiens

<400> 5359

gacacaaatt	ctgttttctg	ttttgaagat	tagcaccaca	gacaggtgat	cattaatgaa	60
atatggccct	taaaatacac	attacaaaag	agaaactgat	ggtaaaattg	ctggtgaagt	120
taacttttat	catttctcca	ctaattaaaa	gttcagattc	tgggatcaca	tctctaagct	180
gttcatatca	aagagctatt	ttttaaagat	cctgattata	ggcaacaaaa	gcaaaaataa	240
acaaatagga	ttacatcaaa	actgaaaagc	ctctgcacag	caaaggaaac	aacagaatga	300
agagccaacc	tacataatgg	gagaaaatat	ttgtaaatta	tacatctgat	aaggggttaa	360
taatcaaaat	atataaggaa	ctcaaagaat	gcaatagtaa	gaaaacaacc	caattaaaaa	420
acaggcaatt	ccagcctggg	caacatggtg	aaaccctgtc	tctacaaaaa	atagataaaa	480
ttggccgggc	acggtggctc	acgcctgtaa	ccccagcact	ttggttggcc	gagtgggtgg	540
atcgctgag	gtcaggagat	cgagaccagc	ctggccaaca	tggcaaaacc	ccacctgtac	600
tgaaaataca	aaaaattagc	ccgggtgcag	tggtgggcgc	ctgtaatccc	agctactcgg	660
gaggctaagg	caggagaatt	gcttgaaccc	gggaggcgga	ggttgccatg	agccgagttt	720
gcaccattgc	actccagcct	gggcaacaag	agcaaaattc	tgtttcaaaa	aaaaaaaaaa	779

<210> 5360

<211> 801

<212> DNA

<213> Homo sapiens

<400> 5360

agattactaa	cattttttaa	atgacacaaa	ttctgttttc	tgttttgaag	attagcacca	60
cagacaggtg	atcattaatg	aaatatggcc	cttaaaatac	acattacaaa	agagaaactg	120
atggtaaaat	tgctggtgaa	gttaactttt	atcattttctc	cactaattaa	aagttcagat	180
tctgggatca	catctctaag	ctgttcatat	caaagagcta	tttttttaag	atcctgatta	240
taggcaacaa	aagcaaaaat	aaacaaatag	gattacatca	aaactgaaaa	gcctctgcac	300
agcaaaggaa	acaacagaat	gaagagccaa	cctacataat	gggagaaaaat	atttgtaaata	360
tatacatctg	ataaggggtt	aataatcaaa	atatataagg	aactcaaaga	atgcaatagt	420
aagaaaacaa	cccaattaaa	aaacaggcaa	ttccagcctg	ggcaacatgg	tgaaaccctg	480
tctctacaaa	aaatagataa	aattggccgg	gcacggtggc	tcacgcctgt	aaccccagca	540
ctttggttgg	ccgaggtggg	tggatcgctt	gaggtcagga	gatcgagacc	agcctggcca	600
acatggcaaa	accccacctg	tactgaaaat	acaaaaaatt	agccgggtgc	agtgggtggc	660
gcctgtaatc	ccagctactc	gggaggctaa	ggcaggagaa	ttgcttgaac	ccgggaggcg	720
gaggttgcca	tgagccgagt	ttgcaccatt	gcactccagc	ctgggcaaca	agagcaaaat	780
tctgtttcaa	aaaaaaaaaa	a				801

<210> 5361

<211> 235

<212> DNA

<213> Homo sapiens

<400> 5361

gttgcaagtga	gccgagatca	cgctgctaca	ttctagcctg	ggggacagag	tgagatgctg	60
tctcaaaagg	caaaggacca	gatagacatt	tcttaaaaga	agactggcca	aaaggtatat	120
gaaaaactgc	ttaacattaa	ggcttaacac	taatgatcag	ggaaacacac	ttaaaaccac	180
aatgagatat	catattacac	cagttagaat	ggccgttacc	aaaagataaa	tgata	235

<210> 5362

<211> 651

<212> DNA

<213> Homo sapiens

<400> 5362

aaaatataaa	aaatcagccg	ggcaggtggg	caggtgcctg	tagtcccagc	tactcagtgg	60
gctgaggcag	gagaatggta	tgaacccggg	agggcgagct	tgcaagtgcg	tgagatcacg	120
ccactgcact	ccagcctggg	agacagagtg	agactctgtc	tcaaaaaaaa	aaaaaaaatt	180

attttaaatg	taaggatgca	agaatagtag	aaaaaattct	tgtatatcct	tcactaagtt	240
tcctgattat	tacatttttt	accatatttg	cctgattata	ttctctctct	ttataagcat	300
gcacatatat	gtattatttt	gctaaactag	tcttgagtaa	attgcaggca	tgatatccca	360
ttattcttaa	aaacttaagt	ctgcacttgc	caaaaacaag	gacattttcc	tgcataacca	420
cagtgtgcaa	tcaaatcagg	aaattaacat	taataccgtt	tattttatag	tccccattca	480
aatttttcca	attgtcctaa	taatattcct	ttttaattat	ttttaattaa	tagagatggg	540
atctcgcttt	gttggccagg	ttggtcttga	actgctggcc	tcaagcaatc	ctcttgccct	600
agcctcccaa	agggtctagga	ttataggcac	aggccactgc	accagccct	a	651

<210> 5363
 <211> 235
 <212> DNA
 <213> Homo sapiens

<400> 5363	
gttgagatga	gccgagatca
tctcaaaagg	caaaggacca
gaaaaactgc	ttaacattaa
aatgagatat	catattacac
cgctgctaca	ttctagcctg
gatagacatt	tcttaaaaga
ggcttaacac	taatgatcag
cagttagaat	ggccgttacc
ggggacagag	tgagatgctg
agactggcca	aaaggtatat
ggaaacacac	ttaaaaccac
aaaagataaa	tgata
	60
	120
	180
	235

<210> 5364
 <211> 1601
 <212> DNA
 <213> Homo sapiens

<400> 5364						
tctgaaataa	gtattaatac	ctaactttta	atattaattc	tgtcctatgt	gcaacttaca	60
aatacgtcat	ataagtatat	aaattgactt	tacctattat	atgcagaaat	tgaagggggg	120
aattttctgt	tttctagctt	tcttggtta	gtgaagggtg	gggcatttta	tgttttttca	180
ggattgcctt	attcaatgaa	gcaagctggg	tttcttttgg	gaatattgct	tttattcttg	240
gtttcatatg	ttacaggtaa	aatactatat	aatttcttat	ttctgcaact	tcaactgtgc	300
aataactaca	cacatacaca	cacacacaca	cacatgctgc	aactgaattt	cctagttaat	360
taaaaagtgc	atcaaagaat	cctaaagaat	ttaaagcatt	atgcctgagg	agattttact	420
ttcttactaa	tccttttaac	agattagaaa	aagtagaaaa	gcattatata	ttaccaagcc	480
taaatccttt	tcatgtgcct	ttttcacttt	ttgcagaaag	tagtagatgg	ggaagtcatt	540
ttaaagcttc	attaaggcta	agagacgact	gtgctctgaa	agtgcagata	gcagggcttc	600
gtgggcaggt	gcgtgtgaat	gagcaacctt	attcagctgt	tgtttggtga	ggtagaaatg	660
aagctctggt	gatcaaccag	cagggtctcat	caagcctctc	cgcttggett	atgcctgccc	720
aaactcgctg	cctgctactg	tctttaaatg	cagcaataag	ttgcttctgt	atcacatctt	780
ctcttctgtg	tccccttctt	catgtaaata	gttcattcac	acccacgttt	tgtcactctc	840
ccatttaaat	gcaggcttta	caactcataa	tcactctctc	tttttggtgt	cctcgctccc	900
gccttgctcat	cccaccatct	caccttatga	caaacatggc	gtctcctcta	ccttaggata	960
actgtgaaag	aggtggtggc	aatgatcaaa	aacagacacc	actcacagga	gttgctgctg	1020
tggtggatta	gatgcccttt	taccagctag	tgcaaaacac	ctcagctgcc	ctttgctctg	1080
gagtgttgcc	ctgggcctcc	aggggtctct	cttgccctcca	cggggaccaa	tgtgtggtac	1140
agttggagct	ccagggtctc	accactgcag	tacttgctga	actctttccc	ctgccctgtc	1200
ctctcattcc	ccttcttctg	gagcatttca	tccacagacc	ccttgcccaa	gaatgtctgt	1260
ctcagctctg	cttctagaga	tcctccaaga	tgccatccct	cgtaaaacct	caggcttcca	1320
agacctgccc	aacactcagc	tattttttct	caggctgacg	aagacagagt	aaagcatgaa	1380
atagttttca	aattcaaagc	tagagaggca	ttgagctccc	tgcttctctc	ctaccacctc	1440
cacccttaag	acctaaactg	cttctagtta	ttacagctct	taatttgtaa	cttaagacct	1500
ataaattagc	agcatgagac	ctaagtgtgc	ttattaagag	ttgctggtgt	ttaaaaattg	1560
cagtctactt	attggggcat	ttattacact	aaaaaaaaaa	a		1601

<210> 5365
 <211> 781
 <212> DNA
 <213> Homo sapiens

<400> 5365
gcaagttttt ctaagttctg ttttcatgtt atgaaatgtt ggggaacaaa aagaattata 60
aaaattttaca gcaataaatt ctaatttgct ttaagatttt caaatttggt gattaacata 120
aaataattttt tattgtctga gcatacaaaa ttatttaaaa gaaaattctt ttgttaagta 180
acagattcat tcatgaattt ttaaaaaggt tgcatacaat atattcaaag ggagatcaaa 240
atattatagt gattaatacc taagatacct aaaactttta agggaatata tttgtagcct 300
gtattttata agcaaatagaa agcattttaca tttattattg actaaattct taacacatct 360
ttacctttta gtgatcattg tgaactttta taaaatgtct agtgttctca tcccaaccat 420
acccttcttc agcaagcctt cataccatct ctgaaattgg ttgcctcttc tctgtgacat 480
aagtatataa attgtatata aattatatga gaatcaatga gaatcaagga ggagaatcaa 540
tgccaactct gttgccagta acttcagacc ttggctaagc cgttttaacc tactgaagtc 600
caaattttct cctccaaaaa agtaaaacat gaacacctac ctcaaaaaga tttcacgtta 660
tggtctgcat attctcagca tctagctctt tgattctcct tggccagtga cctgctgttc 720
agttttcctg cttccagcat ctgtctactt tctcatcagt cctccatgct gctgcaagtt 780
a 781

<210> 5366
<211> 233
<212> DNA
<213> Homo sapiens

<400> 5366
agtgtaacag tatgtatgca tgtctttttat gctgaagatg gggctgtaat tcacactgtt 60
tccacagttg agagcatctt ccacatgtgg tagattaagg tgaaactgca tatgggtggt 120
gggtgaatcat ttttctgtag gctgcgtggt tgattgctag tgttaccgaa tgtacttttt 180
ccacttactg aagggtccat cattatttga atcatctttc tttacttttc tag 233

<210> 5367
<211> 648
<212> DNA
<213> Homo sapiens

<400> 5367
agggagacaa taatgagggg ctttcagttt tactttacat aattttcttt taagtattgg 60
aatttaggtg atttttcctt tgggggtttt tgtattttcc aatcacaata aataaaataa 120
gttataaata tttgttgcat gaatgaaatg tataaaccca tttatgtatg tattttttta 180
aaatttagtat attattaagt ctatacaata ttagtatatt gttatgtatg tataagcttt 240
ttaacatgaa gtttgcagaa tatagtactt cttccaaact ctatgacatg gggggaactg 300
aagtattggg atatcttgta ccagtgtgaa aattcaagaa gagaccgtgt gtggtggctc 360
atgcctataa tcccagcat ttgggatgcc aaagcaggat gatctcttgg agctaggcgt 420
tcaagaccag cctgggcaac atatcaagac cccatctcta aaaaaaaaaa aaaaaattaa 480
ctgggtgtgg tagtgcgggc ctatagtcct agctattcca gaagctgagg tgggaggatt 540
gcttgagccc aggagtttga ggctgtagtg acctatacca gtgattatac cagtgcactc 600
tagcccaggc aacagagtga gacctgtctt caaaaaaaaa aaaaaaaa 648

<210> 5368
<211> 648
<212> DNA
<213> Homo sapiens

<400> 5368
agggagacaa taatgagggg ctttcagttt tactttacat aattttcttt taagtattgg 60
aatttaggtg atttttcctt tgggggtttt tgtattttcc aatcacaata aataaaataa 120
gttataaata tttgttgcat gaatgaaatg tataaaccca tttatgtatg tattttttta 180
aaatttagtat attattaagt ctatacaata ttagtatatt gttatgtatg tataagcttt 240
ttaacatgaa gtttgcagaa tatagtactt cttccaaact ctatgacatg gggggaactg 300
aagtattggg atatcttgta ccagtgtgaa aattcaagaa gagaccgtgt gtggtggctc 360

ccccactgt	tttaagttaa	actgtattgt	tggcctggga	gcaagggtaa	tgggtagttt	180
ttcctttag	tttaagctttg	agctgtcatt	tcttatttta	gttattgtac	ttgcctatga	240
aggctcttct	aatttttaaat	tcttaactcg	ttttggtgaa	gtagatgaac	aaccaagttt	300
attgaagctt	taatcatagt	tgaacatgta	attgagtcac	tgggatctgc	ataaaagttt	360
gcagattctg	atatacagtc	tttataggag	ttagaatatg	aagattgtag	tagctatttt	420
catcacccat	cagacttata	tgtttattca	gtagagctga	aattattaaa	tgtatgaata	480
ttactggctt	tttcctgacc	attcacactt	catggtgatt	tcacaagaga	aggatatga	540
ttctggtttc	cttgccagact	tgttttttat	aatcacgttt	attgaggctt	aattttcata	600
caataaattt	tatatatatt	ttaagtttac	aatttgccac	tcagatcaag	atacggaaaa	660
ttctcatcta	ttggagaaag	tttcctcata	cttctttgca	gccatcctcc	ccaacctgcc	720
acttggccca	ggcaatcact	aatctaattt	ttaacactac	agattagttt	gccacttcat	780
ctaaatagaa	acatatattta	tgtagtgtgt	tgtctggctt	ttttccttca	acaatgtctg	840
ccaataatat	tgcattttatt	gaaagttact	tcatttttat	tgctgagtag	taagtagtct	900
attgtgtaat	ggataccaca	gtttatacat	tcgtctgtgg	atggacattt	gggggttttta	960
cgcttttaag	ttgcaatgaa	catgcataca	agtattgctg	tgatcattgt	ttttccttct	1020
cttgaataaa	taactagaag	tggaa				1045

<210> 5373
 <211> 1045
 <212> DNA
 <213> Homo sapiens

<400> 5373						
tttaaaagtt	accttgatga	cagagtcatt	gctatacttg	caacttattt	tattgtgggg	60
gatcagtga	ataccctcta	gtaatactga	gatgtataga	aaatgccct	aaactaaatg	120
ccccactgt	tttaagttaa	actgtattgt	tggcctggga	gcaagggtaa	tgggtagttt	180
ttcctttag	tttaagctttg	agctgtcatt	tcttatttta	gttattgtac	ttgcctatga	240
aggctcttct	aatttttaaat	tcttaactcg	ttttggtgaa	gtagatgaac	aaccaagttt	300
attgaagctt	taatcatagt	tgaacatgta	attgagtcac	tgggatctgc	ataaaagttt	360
gcagattctg	atatacagtc	tttataggag	ttagaatatg	aagattgtag	tagctatttt	420
catcacccat	cagacttata	tgtttattca	gtagagctga	aattattaaa	tgtatgaata	480
ttactggctt	tttcctgacc	attcacactt	catggtgatt	tcacaagaga	aggatatga	540
ttctggtttc	cttgccagact	tgttttttat	aatcacgttt	attgaggctt	aattttcata	600
caataaattt	tatatatatt	ttaagtttac	aatttgccac	tcagatcaag	atacggaaaa	660
ttctcatcta	ttggagaaag	tttcctcata	cttctttgca	gccatcctcc	ccaacctgcc	720
acttggccca	ggcaatcact	aatctaattt	ttaacactac	agattagttt	gccacttcat	780
ctaaatagaa	acatatattta	tgtagtgtgt	tgtctggctt	ttttccttca	acaatgtctg	840
ccaataatat	tgcattttatt	gaaagttact	tcatttttat	tgctgagtag	taagtagtct	900
attgtgtaat	ggataccaca	gtttatacat	tcgtctgtgg	atggacattt	gggggttttta	960
cgcttttaag	ttgcaatgaa	catgcataca	agtattgctg	tgatcattgt	ttttccttct	1020
cttgaataaa	taactagaag	tggaa				1045

<210> 5374
 <211> 564
 <212> DNA
 <213> Homo sapiens

<400> 5374						
tagcttgtga	tttttttttt	ttactatttt	ttactgtgat	aaaaaatgct	gtggtaaaca	60
cctttgtgtc	acatacattg	tcattctgtc	cagttttctc	tatagaaacc	aattttttaga	120
atttcttggg	taaagtatat	acatttcacg	tgctttttta	ctagttttta	tattagacaa	180
cttctgatta	aacatttagt	ttaaatgatt	aaaagtatgg	cattacaata	agaatttatg	240
gcttatttga	ttttaaaagt	aggtcttaaa	acaggcaata	tactgtgaca	agcaaaatat	300
ttccatgtca	ttatttcgta	agtatcctta	agaggacag	tatctctctc	aggacttgga	360
ccaaggaatg	agatcaaagg	ggaataatga	ttagcagctt	aattcagctg	atctcaaagt	420
cttaggggaa	aagttttttt	aaaaagttca	aacatatgcc	ctattttaaca	tgtgataaca	480
catattctat	attaaatatc	ctgaattgat	tatagtgcac	gccacacaat	cacttgttct	540
gttgctaaca	atcagatatt	gatt				564

<210> 5375
 <211> 520
 <212> DNA
 <213> Homo sapiens

<400> 5375
 ctgttttcaa aagtgatttt accatttttac attcccacac tcacaatgtc tgagaattca 60
 tgttccttgc tataattttag ggaatttttct tttactttct gccacacagg agtttttttac 120
 ttcattagat taacactttg ctaatatataat tattaacttt taaagagcaa aaaaaaaagg 180
 ctttgcagat gaaaagacca aagcctataa tcaaaacatg acatgaaaag agttttagaac 240
 accctggctt cataagttat cagaaagggtg aatttttatcc tcagactttt agcaacacct 300
 ttaatggcta gccacttgag accttctata atacttcttt cagagtctct gctgctgctt 360
 gaattgtaaa agctgcaata gaaatatgtt tctttacttc tttccaggcc aaacgagagt 420
 tggcttttatt ttcaatatca aagatagcat catagattcc aggaaatgat tctccagcat 480
 atttgtttgtg gctacttgga gcaaatatga tgtgcctaaa 520

<210> 5376
 <211> 1688
 <212> DNA
 <213> Homo sapiens

<400> 5376
 gtctcactca gtattggggt tagggctcct ctagattcta gtacatcatg atagatcatg 60
 cagtcagtaa aagtcctgct gattttcccc agtaaaagtgc tttagtccac acaaagcctg 120
 atctttaatc catgcctaga attggcaaat gatgccagga aagaaaacag ttggtagtct 180
 cagctatgta gaaaagacaa agacttttag tacatctagt cttaagcgct tccacagctc 240
 tttcgtatct gtaatgtatt ttgcatttga tccatttttt cctagtact gcacctggga 300
 gcgactgcca gtactaccac atcatttcgg tagtggaggt cccattgaa ggtttttttc 360
 atagcacata gcatgatcac gtctaggaag atcgttctgg ctgtagatag tataattatc 420
 tactaataca aaggggggaaa ggacgtgaga tgatgtgaaa ggaagttttg catcatttac 480
 ttgaaagata ctgttcttct gaatttaatc acattgggga ttggaaaaag tagatgaata 540
 aaaattaaaa agaaaaaaac aaatgagttc atgaagttaa gcaattaaag aaaaagacaa 600
 atctaataca gtactgtaat tatttcaaag gttactatct taccctaaac tcatttctat 660
 acttgaaagt tcaaggatcg attgatattt ttgaaattct gaactaaatg gaaatattaa 720
 gatggctcat gtgtgcata ataaatgtta tttgtatcct cagaataaac taataaattt 780
 caagggtaca aaataggatt actatttgtg aactgtattg tatcccagaa ctctgtactt 840
 ttgtctgttc aaaatgaaaa cagtagttat tatattatct taacccttat aaaaggggat 900
 atgatgtaaa aaatttttagc cattcagtac agagtacaag tcacataaaa gtctaccacc 960
 gaaatgcaag cactatttgt attttgtttg atattcatat atttagtttt atcacttttt 1020
 ttaaccagta agtcatggac aacttactat ataagtgaag aatgtatata tgatcattgt 1080
 atgattcatt ttatattata ctataatcca ttctcccttg atatttagct tgtgattttt 1140
 tttttttact attttttact gtgataaaaa atgctgtggg aaacaccttt gtgtcacata 1200
 cattgtcatt ctgtccagtt ttctctatag aaaccaattt ttagaatttc ttggttaaag 1260
 tatatacatc tcacgtgctt ttttactagt ttttatatta gacaacttct gattaaacat 1320
 ttagttttaa tgattaaaag tatggcatta caataagaat ttatggctta tttgatttta 1380
 aaagtaggtc ttaaaacagg caatatactg tgacaagcaa aatatttcca tgtcattatt 1440
 tcgtaagtat ccttaagagg aacagtatct ctctcaggac ttggaccaag gaatgagatc 1500
 aaaggggaat aatgatttag agcttaattc agctgatctc aaatgcttag gggaaaagtt 1560
 tttttaaaaa gttcaaacat atgccctatt taacatgtga taacacatat tctatattaa 1620
 atatcctgaa tgattatagt gcatgccaca caatcacttg ttctgttgct aacaatcaga 1680
 tattgatt 1688

<210> 5377
 <211> 518
 <212> DNA
 <213> Homo sapiens

<400> 5377

ctgttttcaa	aagtgatttt	accatttttac	attcccacac	tcacaatgtc	tgagaattca	60
tgttccttgc	tataattttag	ggaatttttct	tttacttttct	gccacacagg	agtttttttac	120
ttcattagat	taacacttttg	ctatataaatt	attaactttt	aaagagcaaa	aaaaaaggct	180
ttgcagatga	aaagacccaaa	gcctataatc	aaaacatgac	atgaaaagag	tttagaacac	240
ccgggcttca	taagttatca	gaaagggtgaa	ttttatcctc	agactttttag	caacaccttt	300
aatggctagc	cacttgagac	cttctataat	acttctttca	gagttcctgc	tgctgcttga	360
attgtaaaag	ctgcaataga	aatatgtttc	tttacttctt	tccaggccaa	acgagagttg	420
gctttatttt	caatatcaaa	gatagcatca	tagattccag	gaaatgattc	tccagcatat	480
ttgttgtggc	tacttggagc	aaatatgatg	tgccataa			518

<210> 5378
 <211> 4507
 <212> DNA
 <213> Homo sapiens

<400> 5378						
atgtagtaat	tttgccctgga	tggtttttgga	tataatagcc	aattcatcac	ttgtgatttg	60
atgactctta	gggtctctag	tttttcttaa	cagcctccaa	attgaagttt	cagaatcctt	120
actgcaaaaa	gcacaaaagt	tttcattgcc	attttgatag	tgatatgtag	ctcgtaaata	180
ataattctta	cctctgtgtt	agataaaaaca	tccagtaaaa	cagcatcaag	tttagctttg	240
atagaaggga	acaattagag	ttggtgtaga	gacagaccag	ttaggatgag	ggcatgaaat	300
acagcagaag	cagtaggaag	agaagagaga	ctgaggatct	tgaattaggg	tctagatgaa	360
aatttaggat	gattcctagg	tttggggaatg	gagggagagc	ttaaacaaga	tagagaatat	420
agacacagat	tttggaggaa	atgattttct	caagggactg	ctgagtccaa	ggaatgttta	480
caaatcctca	agaagtactc	cagggtattt	gtaagatctg	aggctcatag	gccttttctg	540
gctctcagga	tttagagtcg	taataggcag	taatgtaaat	tcactagcta	actttgaggt	600
tgcaacattc	atagcactct	gaactttgag	ggcatcttgt	tttaattcaa	aaaactggta	660
atccctgctt	ttgattgtga	tgtaagtagc	agtacacaag	catgggaata	agtaaatacca	720
ataaaggagt	atthaggctc	acctgctaaa	tactcagtgt	gccacccaaa	ccatctgtaa	780
tggtgcccc	tattgaaaac	attctttttc	cagaatgggc	aaggaaggct	ggatgggcaa	840
aagcaaaaata	aatgtaccac	agacccttga	ttctgttagt	atcagtgata	aaacatgatt	900
gataaaaacta	ggcatgatac	attcttaagg	tacagaaaaa	tgtggaaatt	gtgtcaagaa	960
aattcacaaa	ttttaaattg	ttcttttagc	tgatagtaat	aaatgggatc	attataattt	1020
tatgtaaaac	cttcaaaggc	ttcctactaa	agaaagctga	attccagtaa	cagattgagc	1080
ccagactact	cagttcatat	ttgaggccaa	cttagactat	ttttgatgcc	ttaaagattc	1140
cttcaagtcc	cctttctctt	tctaccatac	ccccagtaaa	gctacttaaa	atcctctgta	1200
ggaaagagct	gagtaattgg	gggcagagat	ggaggacaaa	tttaagggaa	cagaaagcca	1260
ttgggaagac	aaatgaaagc	cagaatctga	agataathtt	aaaaccttca	gggaaagtag	1320
gtgtctaate	acaggactta	attcacttga	gtagaaatht	gtaatttagc	cataggaatt	1380
taggaagtgt	tagttacaag	aggtaacttg	aagctgtgga	catgatgata	gcttttgttg	1440
cataattaga	atgtgcaaaa	cactttgtca	agtgtctatg	atagcttttc	tcttcagaac	1500
atcaccatga	tattttacag	tataacctgt	attttacaga	tggagaaatg	taggcaaaag	1560
aaaggggcat	aacttgccctc	cagggtcaca	tagatagcaa	atgatgaaat	ttatatttaa	1620
aattagaaac	tgattccaaa	gtccttacac	tcttaaccat	gaaactgaag	acatctaagt	1680
caccacgcaa	aaccagaat	ctaaatggcc	atthattagt	gcttattcct	ttatttccta	1740
atattaatta	aatgacttaa	ttaccatgag	aagataatgt	gctttcagtt	ttcgcagtag	1800
ttagttcagc	cattgatttt	cttactaaga	acctctaaaa	ggccaatggg	cagttgacaa	1860
aaattagggga	tggtattctgc	agctgtaaga	ccaagtgaag	gtaaaaggcc	catggcggta	1920
aatttgtccc	ttgcaggcag	tttgttctaa	atgcttgtgc	ctagaaataa	acttagcctt	1980
attatcatct	ggactctgag	caatttttgc	atctcagtat	tcttagatgt	ggatgattaa	2040
aaggccacgt	atgaaggcag	ctaacataag	acactttgtg	ggagtggagt	aattcattaa	2100
aatcaaatat	tagtgtatta	ggcaaaacaaa	ttcaatcatt	tcagttatgt	aaagctagct	2160
gggttctcag	tttttagcaag	ttagggaaga	tatcacatta	caggagaaag	acaatctaaa	2220
agttttttgaa	gttttaaatgg	atttaaccac	ttgtaaaatg	ttataaattg	taggacactt	2280
ctcccagaga	gatcctctag	catacatgga	tgatttactt	ttcatattta	tgatttggca	2340
ggaaagtttg	agttcatttg	aagttaggct	tttttaatagt	ttttctcctc	ccagtgaatt	2400
tttctgagtt	gatagggtgta	aaatttatag	atthttattga	taataaaaagt	ttgtaagcat	2460
ctttaatgta	gcgattccat	tgcttatttt	ttattcagca	ctcaggtcac	ttcctatgtg	2520
ctggagataa	ttaaagactc	cacttccaag	aaaggatata	acaaggaaaa	taagagggtg	2580
ttaaataaaa	attatgccaa	agataagcct	gtagaaagct	tctgtggtgc	gtatttggta	2640

gattttatgg	atggatttctg	tgaaggataa	atagcagagt	cctgaggggg	gaaaaaagga	2700
tagaagtggc	caaatacaag	agaggaaatg	ggagaaagaa	taggatatga	agaagcctgg	2760
cattgagagg	tggtattggc	ctgttaagaa	aacttgtttg	cctagcccct	aagttctagt	2820
ctcactcagt	attgggttta	gggctcctct	agattctagt	acatcatgat	agatcatgca	2880
gtcagtaaaa	gtcctgctga	ttttccccag	taaagtgtct	tagtccacac	aaagcctgat	2940
ctttaatcca	tgccctagaat	tggcaaatga	tgccaggaaa	gaaaacagtt	ggtagtctca	3000
gctatgtaga	aaagacaaaag	acttttagta	catctagtct	taagcgcttc	cacagctctt	3060
tcgtatctgt	aatgtatttt	gcatttgatc	cattttttcc	tagttactgc	acctgggagc	3120
gactgccagt	actaccacat	catttcggta	gtggaggtcc	ccattgaagg	tttttttcat	3180
agcacatagc	atgatcacgt	ctaggaagat	cgttctggct	gtagatagta	taattatcta	3240
ctaatacaaa	gggggaaagg	acgtgagatg	atgtgaaagg	aagttttgca	tcattttactt	3300
gaaagatact	gttcttctga	atttaatcac	attggggatt	ggaaaaagta	gatgaataaa	3360
aattaaaaag	aaaaaaacaa	atgagttcat	gaagttaagc	aattaaagaa	aaagacaaat	3420
ctaatacagt	actgtaatta	tttcaaagg	tactatttta	ccctaaactc	atttctatac	3480
ttgaaagttc	aaggatcgat	tgatattttt	gaaattctga	actaaatgga	aatattaaga	3540
tggtcatgt	gtgcataat	aaatgttatt	tgtatcctca	gaataaacta	ataaatttca	3600
agggtacaaa	ataggattac	tatttgtgaa	ctgtattgta	tcccagaact	ctgtactttt	3660
gtctgttcaa	aatgaaaaca	gtagttatta	tattatttta	acccttataa	aagggaatat	3720
gatgtaaaaa	atttttagcaa	ttcagtagag	agtacaagtc	acataaaagt	ctaccaccga	3780
aatgcaagca	ctatttgtat	tttgtttgat	attcatatat	ttagttttat	cacttttttt	3840
aaccagtaag	tcatggacaa	cttactatat	aagtgaaaaa	tgtatatatg	atcattgtat	3900
gatcattttt	atattatact	ataatcaatt	ctccattgat	atttagcttg	tgattttttt	3960
tttttactat	tttttactgt	gataaaaaat	gctgtggtaa	acacctttgt	gtcacatata	4020
ttgtcattct	gtccagtttt	ctctatagaa	accaattttt	agaatttctt	ggttaaagta	4080
tatacatttc	acgtgctttt	ttactagtgt	ttatattaga	caacttctga	ttaaacattt	4140
agtttaaatg	attaaaagta	tggcattaca	ataagaattt	atggcttatt	tgatttttaa	4200
agtaggtctt	aaaacaggca	atatactgtg	acaagcaaaa	tatttccatg	tcattatttc	4260
gtaagtatcc	ttaagaggaa	cagtatctct	ctcaggactt	ggaccaagga	atgagatcaa	4320
aggggaataa	tgattagcag	cttaattcag	ctgatctcaa	atgcttaggg	gaaaagtgtt	4380
tttaaaaagt	tcaaacatat	gccctattta	acatgtgata	acacatatct	tatattaaat	4440
atcctgaatt	gattatagtg	catgccacac	aatcacttgt	tctgttgcta	acaatcagat	4500
attgatt						4507

<210> 5379
 <211> 520
 <212> DNA
 <213> Homo sapiens

<400> 5379						
ctgttttcaa	aagtgatttt	accatttttac	attcccacac	tcacaatgtc	tgagaattca	60
tggtcccttg	tataatttag	ggaattttct	tttactttct	gccacacagg	agttttttac	120
ttcattagat	taacactttg	ctaataataat	tattaaacttt	ttaaagagcaa	aaaaaaaagg	180
ctttgcagat	gaaaagacca	aagcctataa	tcaaaacatg	acatgaaaag	agtttagaac	240
acctgggctt	cataagttat	cagaaagggtg	aatttttatcc	tcagactttt	agcaacacct	300
ttaatggcta	gccacttgag	accttctata	atacttcttt	cagagtctct	gctgctgctt	360
gaattgtaaa	agctgcaata	gaaatatgtt	tctttacttc	tttccaggcc	aaacgagagt	420
tggttttatt	ttcaatatca	aagatagcat	catagattcc	aggaaatgat	tctccagcat	480
atttgttgtg	gctacttggg	gcaaatatga	tgtgcctaaa			520

<210> 5380
 <211> 3915
 <212> DNA
 <213> Homo sapiens

<400> 5380						
gggagctgct	ctgggcaggg	ggaaaatgtg	ctcatctcag	gaagctgggtg	tggtatgggtac	60
tggacctggc	taggcctgat	actgaccagc	agatggggcg	tgtgtttgta	gccccagagg	120
tggtaggccg	gcagcgggtat	ggacgccctg	tggactgctg	ggccattgga	gtcatcatgt	180
acatcctgtg	agtggacaga	tggacaagca	ggcttgccagt	cagatgggggt	gggggcatgt	240

gtctgtggcc	tttctgtgtg	acccttcccc	catgcaggct	ttcaggcaac	ccacctttct	300
atgaggaggt	ggaagaagat	gattatgaga	accatgataa	gaatctcttc	cgcaagatcc	360
tggctggtga	ctatgagttt	gactctccat	attgggatga	tatttcgcag	gcagggtgagg	420
aggtgcctgc	ccagcacttg	gtagaacgca	agggagtggg	gaggggtgtcc	tgctctcatc	480
ttcctctgtg	gtattctgct	tctgtccccc	agcccattta	tcacctctag	acattgagat	540
ggggtgccc	tgactatccc	ctccttggtt	ttgtccacag	ccaaagacct	ggtcacaagg	600
ctgatggagg	tggagcaaga	ccagcggatc	actgcagaag	aggccatctc	ccatgagtgg	660
tgagcagggt	ccaggggagg	gtgggagagg	ccagggtccc	cctcacaccc	agcagcccca	720
tctttgagge	ctagaagggg	tgcaggtaac	tagagctcag	ggcagcccag	aggctctgcc	780
tggtagtccc	tggatgccac	atagaagggc	tgagcagagt	ctccacaaag	gctcattctc	840
tcagatccag	acacacttgc	accctttcca	ggatttctgg	caatgctgct	tctgataaga	900
acatcaagga	tgggtgtctgt	gcccagattg	aaaagaactt	tgccaggggc	aagtgggaagg	960
taaggcttgg	ataactccct	tcttgggtct	atcccaagta	ttgcttctgg	cactcagttt	1020
cttgccctgca	tcacacccct	gcagccacac	acaagctttt	ctcaggccat	cagggtgtggg	1080
tgtagccact	gtgattacct	taagtaggag	tgctgagcag	ctgagtactt	ggccctgggg	1140
tggatggagg	tggccggggg	tactatggaa	ggagtttggt	ttggtcactg	ccaagcaatg	1200
gatccagcaa	gcctcacctt	tagcctttct	ccactgtgct	cctttcagaa	ggctgtccga	1260
gtgaccaccc	tcataaaacg	gctccgggca	ccagagcagt	ccagcacggc	tgcagcccag	1320
tcggcctcag	ccacagacac	tgccaccccc	ggggctgcag	gtggggccac	agctgcagct	1380
gcgagtggag	ctacctcagc	ccctgagggt	gatgctgctc	gtgctgcaaa	gagtgataat	1440
gtggcccccg	cagaccgtag	tgccacccca	gccacagatg	gaagtgccac	cccagccact	1500
gatggcagtg	tcaccccagc	caccgatgga	agcatcactc	cagccactga	tgggagtgtc	1560
accccagcca	ctgacaggag	cgctactcca	gccactgatg	ggagagccac	accagccaca	1620
gaagagagca	ctgtgcccac	cacccaaagc	agtgccatgc	tggccaccaa	ggcagctgcc	1680
acccctgagc	cggctatggc	ccagccggag	agcacagccc	cagagggcgc	cacaggccag	1740
gctccaccct	ctagtaaagg	ggaagaggct	gctggttatg	cccaggagtc	tcaaagggag	1800
gaggccagct	gagtaggcag	cctgggtagg	gggggcaggg	gatgggcagg	aggggtgggag	1860
agtggatgag	gggctttctc	ctgtacatag	agtcaactgg	atgatgccct	cgctccccca	1920
tgccccca	tcccagtggg	gcataactag	gggtcacagg	agagcagtct	cgtctcctgt	1980
gtgtatgtgt	gtgagtgggt	ggcaggccag	tggcaggggc	ggccccagcc	cctgcatgga	2040
ttccttgttg	cttttctgtc	ttttgtctag	ttcaccagtt	tctgttcctt	gtgggatgct	2100
gctctaggga	tactcagggg	gctcctgctc	tccttcccct	tccttctctg	cctcaccatt	2160
cccctaggga	ggccctgcag	gtcccacact	ctcccaggcc	ctaaacttgg	gcggccttgc	2220
cctgagagct	ggctcctcag	cgaggccctg	tcagcggctc	taggctcctg	cacatgaagg	2280
tgtgtgcctg	tgggtgttgg	gctgctctag	gagcagatac	aggctgggat	agaggatgca	2340
gaaaggtagg	gcagtatggt	taagtccaga	cttggcacat	ggctagggat	actgctcact	2400
agctgtggag	gtcctcagga	gtggagagaa	tgagttaggag	ggcagaagct	tccatttttg	2460
tccttccctaa	gacctgttta	tttgtgttat	ttcctgcctt	tccgagtcct	gcagtgggct	2520
gccctgtacc	ctgaacctca	tgagcctcta	agggaagga	ggaacaatta	ggacgtggca	2580
atgagacctg	gcagggcaga	gtacaagccc	agcacccagt	gtcccagcct	taatgggtcc	2640
ttaccatggg	ccaaacaggg	agggctgata	cctccttgct	cttcctagat	gcccacctcc	2700
tacaatctca	gcccacaagt	cctctccacc	tagggggctt	gctgcatggc	aataactcat	2760
aatttgattt	ggaggtttgc	cccttacagc	ggcagatttt	ctgctcagtt	caacaatgaa	2820
atgaagagga	atgcctctct	tctacagctc	acttctatca	gaggcccagg	tgctctagag	2880
ccacattgag	ttgctttttc	tgggatgagg	aagtagggtt	aaactcccca	gtttcctgag	2940
ggaggctcct	gacagggtgc	ctttgtcaga	ccctaccaca	gcctggatag	gcagccacat	3000
tggctcctgc	ccttgctcgg	cactccgtgg	tggctcctgc	cttctccctg	catgcctgtg	3060
ggtctgctct	ggtgtgtgaa	ggtcgggtgg	ttaactgtgt	gcctactgaa	cctggcaaat	3120
aaacatcacc	ctgcaaagcc	tctggccacc	ctctgcctt	tgcttccctt	gtcctactgg	3180
ggaggagccc	ctggaaggca	gtggggaagg	gagaggctgg	gagcaggttc	acaagtagtg	3240
gctgggagta	gtagtgaaca	gtgccctgtg	gatttcttgg	gctgagggtg	aagatcatcc	3300
tcaccacagt	gtattcctca	atggtgggtg	tgggtggggg	cctctgaact	ctagaaatcc	3360
atgtgagtag	tgggtcttgg	gctgcatttg	gaccaaggaa	tactccctgg	gctgagagct	3420
caagtaaggg	ctgctgtttt	tgactcctgt	tgaccgagga	gccttactct	tgatttaggc	3480
atagagctgg	aatctacctg	ggccagccag	cgcaaggaca	gacctgtctc	atagccaaag	3540
atagcttccc	tgagctaggg	agagggtgta	gggtgagcaa	tgcacaaaga	ttctatgctg	3600
ctctgtgttg	attccttctt	tctgtgaaca	cctgtgcttt	ccacctatgc	cccaaataag	3660
atctcactct	gggtctatatt	cagctggagc	agatcagctt	tatattatgg	gactatgcac	3720
agggtttctt	ctgggtagag	ggagtaaac	tgccacagat	actaagccta	aaaacccaaa	3780
agttgactta	ctccagccca	ggtgggcctg	ggtgaactca	ccagggatgc	tgctctctgg	3840
gaggacctca	aagataacct	cctcaaggat	aacttctctg	atgtgggaat	aataaaaagg	3900

atttggttagt ctcta

3915

<210> 5381
<211> 148
<212> DNA
<213> Homo sapiens

<400> 5381
aagccggacc tgtagcagtt tctttggctg cctgggcccc ttgagtcacg ccatcatgcc 60
tatccgtgct ctgtgcacta tctgtctccga cttcttcgat cactcccgcg acgtggccgc 120
catccactgc ggccacacct tccacttg 148

<210> 5382
<211> 3915
<212> DNA
<213> Homo sapiens

<400> 5382
gggagctgct ctggggcaggg ggaaaatgtg ctcatctcag gaagctggtg tggatggtac 60
tggacctggc taggcctgat actgaccagc agatgggccc tgtgtttgta gccccagagg 120
tggtagggcg gcagcgggat ggacgccttg tggactgctg ggccattgga gtcattcatgt 180
acatcctgtg agtggacaga tggacaagca ggcttgagct cagatggggg gggggcatgt 240
gtctgtggcc tttctgtgtg acccttcccc catgcaggct ttcaggcaac ccacctttct 300
atgaggaggt ggaagaagat gattatgaga accatgataa gaatctcttc cgcaagatcc 360
tggctggtga ctatgagttt gactctccat attgggatga tatttcgcag gcaggtgagg 420
aggtgcctgc ccagcacttg gtagaacgca agggagtggg gaggggtgtcc tgctctcatc 480
ttctctgtg gtattctgct tctgtcccc agccatttta tcacctctag acattgagat 540
ggggtgccc tgactatccc ctcttgggt ttgtccacag ccaaagacct ggtcacaagg 600
ctgatggagg tggagcaaga ccagcggatc actgcagaag aggccatctc ccatgagtgg 660
tgagcagggg ccagggggagg gtgggagagg ccaggggtccc cctcacaccc agcagcccca 720
tctttgaggg ctagaagggg tgcaggtacc tagagctcag ggcagcccag aggtctctgcc 780
tggtagtccc tggatggcac atagaagggc tgagcagagt ctccacaaag gctcattctc 840
tcagatccag acacacttgc accctttcca ggatttctgg caatgctgct tctgataaga 900
acatcaagga tgggtgtctgt gccagatttg aaaagaactt tgccagggcc aagtggagg 960
taaggcttgg ataactccct tcttggctct atcccaagta ttgcttctgg cactcagttt 1020
cttgccctgca tcacacccct gcagccacac acaagctttt ctgagccat caggtgtggg 1080
tgtagccact gtgattacct taagtaggag tgctgagcag ctgagtactt ggccctgggg 1140
tggatggagg tggccggggg tactatggaa ggagtgtggt ttggtcactg ccaagcaatg 1200
gatccagcaa gcctcaccct tagcctttct ccactgtgct cctttcagaa ggtgttccga 1260
gtgaccaccc tcataaaagc gctccggggc ccagagcagc ccagcacggc tgcagcccag 1320
tcggcctcag ccacagacac tgccaccccc gggctgcag gtggggccac agctgcagct 1380
gcgagtggag ccacctcagc cctgaggggt gatgctgctc gtgctgcaaa gagtataat 1440
gtggcccccg cagaccgtag tgccacccca gccacagatg gaagtgccac cccagccact 1500
gatggcagtg tcaccccagc caccgatgga agcatcactc cagccactga tgggagtgtc 1560
accccagcca ctgacaggag cgctactcca gccactgatg ggagagccac accagccaca 1620
gaagagagca ctgtgcccac cacccaaagc agtgccatgc tggccaccaa ggcagctgcc 1680
acccctgagc cggctatggc ccagccggac agcacagccc cagagggcgc cacaggccag 1740
gctccaccct ctagtaaagg ggaagaggct gctggttatg cccaggagtc tcaaagggag 1800
gaggccagct gaggtaggag cctggtgagg gggggcagg gatgggcagg aggggtggag 1860
agtggatgag gggcttctca ctgtacatag agtcatggc atgatgccct cgctcccca 1920
tgcccccaca tcccagtggt gcataactag gggtcacggg agagcagttc cgtctcctgt 1980
gtgtatgtgt gtgagtgggt ggagggccag tggcagggcc ggccccagcc cctgcatgga 2040
ttcttctgtg cttttctgtc ttttctagc ttaccagtt tctgttctct gtgggatgct 2100
gctctaggga tactcagggg gctcctgtct tccttccctc tcccttcttg cctcaccatt 2160
cccctaggca ggccctgcag gtcccacact ctcccaggcc ctaaacttgg gcggccttgc 2220
cctgagagct ggtcctccag cgaggccctg tcagcggctc taggctcctg cacatgaagg 2280
tgtgtgcctg tgggtgtgtg gctgctctag gagcagatac aggtctggtat agaggatgca 2340
gaaaggtagg gcagtatgtt taagtccaga cttggcacat ggctagggat actgtctact 2400
agctgtggag gtccctcagga gtggagagaa tgagttaggag ggcagaagct tccatttttg 2460

tctccttct	cccttttaggt	aaagtttttta	gggctaataa	atcccaaata	tcaatgttga	12060
tcagtagttt	gtgtttgtgt	agtgttggtt	atatcaaaaa	ctacattgaa	gccgggcaca	12120
gtgggttcacg	cctaaaatcg	caacactttg	ggaggccaag	gtgggcctcc	caccttgaac	12180
taaggagttt	gagaccagcc	tgggcaacat	ggtgaaatcc	catctctaca	aaaaatataa	12240
aagctagctg	ggtgtggtgg	catgcacctg	tagtcctagc	tacttgggag	gctgagggtg	12300
atcctgggag	tttgagcctg	cagtgcctg	tgaagatgcc	actgcactct	agtctgggtg	12360
acagagcaag	accctgtctc	aaaaacacac	acacacacac	acacacacac	aaagaaatac	12420
attgattttt	cacataggta	gtaagagaaa	cattcttttt	gaactcagct	gtttgtgaat	12480
tgaattttgt	aattcaaagt	ctatatattg	taaactattg	atgactttca	atctgcattt	12540
attttgtata	attatttagt	taatatattg	cacttatatt	ccttaaaaaa	taaaattgag	12600
gttggggcgtg	gtggctcaca	cttgtaatcc	cagcactttg	ggaggctgag	gcaggcagat	12660
tgcctgagct	caggagtttg	agatcagcct	gggcaacatc	atgaacccca	tttctactaa	12720
aatacaaaaa	attatctggg	catggtggtg	tacacctgta	gccctagctg	tttggggaggc	12780
taaggcacga	gaattgcttg	aacccgggag	gcagagggtg	cagtgcagca	agatcatgcc	12840
actgcactcc	agcttggcaa	cagagcaaga	ctcttgcttc	cagaaataaa	aataaataaa	12900
ttgtattaac	atcctgatag	tttatctggt	tagtacctag	caagaaagaa	aatgttgaac	12960
atcttaagaa	gagggtcatt	taaaaggcct	cttaaagatc	atgtttgtta	cagtgcctaa	13020
aaattaatat	gttcatctgc	aaaatggaat	aaaaaatctg	ttaaaaatat	atttctactaa	13080
atagtttaag	atgagtcata	tttgtggggt	ttcattttta	atcttctttc	tctaggtgaa	13140
gctgtacttc	acaaaaacag	tagaggagcc	gtcaaattcca	gaggctagca	gttcaacttc	13200
tgtaacacca	gatgttagtg	acaatgaacc	tgatcattat	agatattctg	acaccactga	13260
ctctgatcca	gagaatgaac	cttttgatga	agatcagcat	acacaaatta	caaaagtctg	13320
aatttttttt	tatcaagagg	gataaaaacac	catgaaaata	aacttgaata	aactgaaaaa	13380
ggaccttttt	ttttttaatg	gcaataggac	attgtgtcag	attaccagtt	ataggaacaa	13440
ttctcttttc	ctgaccaatc	ttgtttttacc	ctatacatcc	acagggtttt	gacacttggt	13500
gtccagttga	aaaaagggtg	tgtagctgtg	tcattgtatat	acctttttgt	gtcaaaagga	13560
cattttaaatt	tcaattagga	ttataaaaga	tggcactttc	ccgtttttatt	ccagttttat	13620
aaaaagtggg	gacagactga	tgtgtatacg	taggaatttt	ttccttttgt	gttctgtcac	13680
caactgaagt	ggctaaagag	ctttgtgata	tactgggttc	catcctaccc	ctttgcactt	13740
gtggcaacag	ataagtttgc	agttggctaa	gagagggttc	cgaagggttt	tgctacattc	13800
taatgcatgt	attcgggtta	ggggaatgga	gggaatgctc	agaaaggaaa	taatttttatg	13860
ctggactctg	gaccatatac	catctccagc	tatttacaca	cacctttctt	tagcatgcta	13920
cagttattaa	tctggacatt	cgaggaattg	gccgtgtcga	ctgcttggtg	tttgcgcat	13980
tttttttaaa	gcatattggg	gctagaaaag	gcagctaaag	gaagtgaatc	tgtattgggg	14040
tacaggaatg	aaccttctgc	aacatcttaa	gatccacaaa	tgaagggata	taaaaataat	14100
gtcataggta	agaaacacag	caacaatgac	ttaaccatat	aaatgtggag	gctatcaaca	14160
aagaatgggc	ttgaaacatt	ataaaaattg	acaatgattt	attaaatatg	ttttctcaat	14220
tgtaacgact	tctccatctc	ctgtgtaatc	aaggccagtg	ctaaaattca	gatgctgtta	14280
gtacctacat	cagtcaacaa	cttacactta	ttttactagt	tttcaatcat	aatacctgct	14340
gtggatgctt	catgtgctgc	ctgcaagctt	ctttttttct	attaaatata	aaatattttg	14400
taatgctgca	cagaaatttt	caatttgaga	ttctacagta	agcgtttttt	ttctttgaag	14460
atttatgatg	cacttattca	atagctgtca	gccgtttccac	cctttttgacc	ttacacattc	14520
tattacaatg	aattttgag	ttttgcactg	tttttaaatg	tcatttaactg	ttaggggaatt	14580
ttacttgaat	actgaatata	tataatgttt	atattaaaaa	ggacattttg	gttaaaaagg	14640
aaattagagt	tgcagtaaac	tttcaatgct	gcacacaaaa	aaaagacatt	tgattttttca	14700
gtagaaattg	tctacatgt	gctttattga	tttgctattg	aaagaatagg	gttttttttt	14760
tttttttttt	tttttttaaa	tgtgcagtg	tgaatcattt	cttcatagt	ctcccccgag	14820
ttgggactag	ggcttcaatt	tcacttctta	aaaaaaatca	tcatatatatt	gatatgcca	14880
gactgcatac	gatttttaagc	ggagtacaac	tactattgta	aagctaattg	gaagatatta	14940
ttaaaaagg	ttttttttcc	agaaaatttg	tgtcttcaaa	ttataccttc	accttgacat	15000
ttgaatatcc	agccattttg	tttcttaatg	gtataaaatt	ccatttttcaa	taacttattg	15060
gtgctgaaat	gtttcactag	ctgtggtctg	acctgttaa	tttacaata	cagattgaat	15120
aggacctact	agagcagcat	ttatagagtt	tgatggcaaa	tagattaggc	agaacttcat	15180
ctaaaatatt	cttagtaaat	aatgttgaca	cgtttttccat	accttgctcag	tttcattcaa	15240
caatttttaa	atttttaaca	aagctcttag	gatttacaca	tttatattta	aacattgata	15300
tatagagtat	tgattgattg	ctcataagtt	aaattggtaa	agttagagac	aactattcta	15360
acacctcacc	attgaaattt	atatgccacc	ttgtctttca	taaaagctga	aaattgttac	15420
ctaaaatgaa	aatcaacttc	atgtttttgaa	gatagttata	aatattgttc	tttgttacaa	15480
tttcgggcac	cgcataattaa	aacgtaactt	tattgtttcca	atatgtaaca	tggagggcca	15540
ggtcataaat	aatgacatta	taatgggctt	ttgcactggt	attatttttc	ctttggaatg	15600
tgaaggctctg	aatgagggtt	ttgatatttga	atgttttcaat	gttttttgaga	agccttgctt	15660

tgatatatag	agtattgatt	gattgctcat	aagttaaatt	ggtaaagtta	gagacaacta	2280
ttctaaccac	tcaccattga	aatttatatg	ccaccttgct	tttcataaaa	gctgaaaatt	2340
gttacctaaa	atgaaaatca	acttcatggt	ttgaagatag	ttataaatat	tggtctttgt	2400
tacaatttcg	ggcaccgcat	attaaaaacg	aactttattg	ttccaatatg	taacatggag	2460
ggccagggtc	taaataatga	cattataatg	ggcttttgca	ctgttattat	ttttcctttg	2520
gaatgtgaag	gtctgaatga	gggttttgat	tttgaatggt	tcaatgtttt	tgagaagcct	2580
tgcttacatt	ttatgggtga	gtcattggaa	atggaaaaat	ggcattatat	atattatata	2640
tataaatata	tattatacat	actctcctta	ctttattttca	gttaccatcc	ccatagaatt	2700
tgacaagaat	tgctatgact	gaaagggttt	cgagtcctaa	ttaaaacttt	atztatggca	2760
gtattcataa	ttagcctgaa	atgcattctg	taggtaatct	ctgagtttct	ggaatatatt	2820
cttagacttt	ttggatgtgc	agcagcttac	atgtctgaag	ttacttgaag	gcatcacttt	2880
taagaaagct	tacagttggg	ccctgtacca	tcccaagtcc	tttgtagctc	ctcttgaaca	2940
tgtttgccat	acttttaaaa	gggtagttga	ataaatagca	tcaccattct	ttgctgtggc	3000
acaggttata	aacttaagt	gagtttaccg	gcagcatcaa	atgtttcagc	tttaaaaaat	3060
aaaagtaggg	tacaagttta	atgttttagt	ctagaaattt	tgtgcaatat	gttcataacg	3120
atggctgtgg	ttgccacaaa	gtgcctcgtt	tacctttaaa	tactgttaat	gtgtcatgca	3180
tgcatagga	aggggtggaa	ctgtgcacta	aagtgggggc	tttaactgta	gtatttggca	3240
gagttgcctt	ctacctgcca	gttcaaaaagt	tcaacctgtt	ttcatataga	atatatatac	3300
taaaaaattt	cagtctgtta	aacagcctta	ctctgattca	gcctcttcag	atactcttgt	3360
gctgtgcagc	agtggctctg	tgtgtaaatg	ctatgcactg	aggatacaca	aaaataccaa	3420
tatgatgtgt	acaggataat	gcctcatccc	aatcagatgt	ccatttggtta	ttgtgtttgt	3480
taacaaccct	ttatctctta	gtgttatata	ctccacttaa	aactgattaa	agtctcattc	3540
ttgtcattgt	gtgggtgttt	tattaaatga	gagtttataa	ttcaaattgc	ttaagtccat	3600
tgaagtttta	attaatgggc	agccaaatgt	gaatacaaa	ttttcagttt	ttttttttcc	3660
tgctgtcctt	caaagcctac	tgtttaaaaa	aaaaaaaaaa	aaaaaacatg	gcctgagagt	3720
agagtatctg	tctactcatg	tttaattaa	gaaaaaacact	tatttttagg	gctttagtca	3780
tcacttcata	aattgtataa	gcacattaaa	tagcgttcta	gtcctgaaaa	agtccaagat	3840
tcttagaaaa	ttgtgcata	ttttattatg	acagatgttt	gaagataatt	ccccagaatg	3900
gatttgatac	tttagatttc	aattttgtgg	cttttgctca	ttattctgta	ctctgccatc	3960
agcatatgga	aagcttcatt	tactcatcat	gacttggtgc	atataaaaa	tgatatttcg	4020
gaatagtcta	aaggactttt	tgtacttgaa	tttaatcatg	ttgtttctaa	tattctttaa	4080
agcttgaaga	ctaaagcata	tcctttcaac	aaagcatagt	aaggtaataa	gaaagtgtag	4140
tttgataca	tgtaaaaaaa	ataaagtaga	caatgtttaca	gtgggactta	ttatttcaag	4200
tttacatttt	ctccatgtaa	ttttttaaaa	agtaaagtga	aaaatgtgca	ataatgtaaa	4260
atatgaagt	tatgtgtaca	cacattttat	ttttcggtat	cttgggtata	cg	4312

<210> 5386
 <211> 169
 <212> DNA
 <213> Homo sapiens

<400> 5386						
ttttaaggga	ggagagttat	tctgatatcc	tttgatttga	tattgtctct	atattattatt	60
gagctggatt	taagtattaa	tcattttaag	tcaaatttct	aatgtatata	tggtctttaa	120
tggctacgac	ccagttacca	tagcaattta	gtgaaataac	tataatgga		169

<210> 5387
 <211> 4826
 <212> DNA
 <213> Homo sapiens

<400> 5387						
tttttttttt	tttttttttg	agactgagtc	ttgctctgtc	accaggctgg	agcagtggtg	60
caatctcggt	tactgcaac	ctccgcctcc	cgggttcaag	tgattctcct	gcctcagcct	120
cccagtagtc	tgggattaca	ggtgtgtgcc	accatgtcca	cctaattttt	gtagttttta	180
gtagagatga	ggtttcacca	tattgatcac	gctggtctca	aactcctgac	aggtgatcca	240
cccacctcgg	cctcccgaag	tgctgggatt	acaggcatga	gccaccaccc	ccagcagaca	300
tacttcatta	tacagtgcaa	aaaaagtcac	atttttaaaa	tatcaccacc	gagctcacca	360
ggatagtctt	tacatatctg	gaagctgtca	agttcatggt	agcaggtata	agatttttaa	420

ccattttttat	caataaacag	agaaaaaaga	aagcttttctc	tatcttgtat	tctattttagt	4140
tatcactctc	ctcttttctc	taaaactcaa	gttcaaaaag	gaaaatctac	ccttgtctct	4200
acttcctcac	atctcattca	ctaatttttc	tatttgtaat	atctactatt	ttaattttagt	4260
tacaaatgca	catatgtgaa	agaatatatg	taaaataata	tattttaatat	caatttggat	4320
atattctata	ccccctgac	ccaatcattt	ccactgacct	tttccttccc	tccaccccaa	4380
tcaccagctc	ccattgtaat	aggcttgatt	ctgccatttc	cagttagcaa	agatctcgca	4440
aacctgtgtt	ttccagcatc	cacctctcta	tcacctccag	aatttttact	cacttatttt	4500
tttttatttt	ttttttttat	tttttttttg	agacggagtc	tcgctctgtc	gcccaggatg	4560
gagtgcagtg	gtgggatctc	ggctcactgc	aagctccgcc	tcccgggttc	acgccattct	4620
cctgcctcag	cctcccaagt	agctgggact	acaggcgccc	gccactacgc	ccgggctaatt	4680
ttttgtattt	ttagtagaga	cggggtttca	ccgttttagc	cgggatgggc	tcgatctcct	4740
gacctcgtga	tccgcccgcc	ttggcctccc	aaagtgctgg	gattacaggc	gtgagccatc	4800
gcgcccggcc	cactcactta	ttttta				4826

<210> 5388
 <211> 1363
 <212> DNA
 <213> Homo sapiens

<400> 5388						
actaactgta	ataaatgtat	gacattattt	tgattgatac	attaaaaaag	agttttttaga	60
acaaatatgg	cattttaactt	tattattttat	ttgcttttaa	gaaatattct	ttgtggaatt	120
gttgaataaa	ctataaaaata	ttatttttga	ttgcagcttt	aaagtggcac	actccataat	180
aatctactta	ctagaaaatag	tgggtgctacc	acaaaaaatg	ttaaccatca	gtaccattgt	240
ttgggagaaa	gaaacagatc	aagaatgcat	attattcagt	gaccgctttc	ctagagttaa	300
aatacctcct	ctttgtgaagg	tttgtaggta	aattgaggta	taaactatgg	atgaaccaa	360
taattagttc	aaagtgttgt	catgattcca	aatttgtgga	gtctgggtgtt	tttaccatag	420
aatgtgacag	aagtacagtc	atagctcagt	agctatatgt	atttgccttt	atgttagaag	480
agactttctt	gagtgcattt	tttaaataga	ggaggtattc	actatgtttt	tctgtatcac	540
agcagcattc	ctagtcctta	ggccctcggg	cagagtgaag	tcattgagtt	ttatgagttc	600
aatattgtca	aataaggcta	cagtatttgc	ttttttgtgt	gaatgtattg	catataatgt	660
tcaagtagat	gattttacat	ttatggacat	ataaaatgtc	tgattacccc	attttatcag	720
tcctgactgt	acaagattgt	tgcaatttca	gaatagcagt	tttataaatt	gatttatctt	780
ttaatctata	acaatttgtg	ttagctgttc	atttcaggat	tatattttct	acaagttcca	840
cttgtgggac	tccttttgtt	gcccctattt	ttttttaaag	aaggaagaaa	gaaaaataag	900
tagcagttta	aaaatgagaa	tggagagaaa	agaaaaagaa	tgaaaaggaa	aggcagtaaa	960
gagggaaaaa	aaggaaggat	ggaaggaatg	aaggaaggaa	gggaggaagg	ggagaaggta	1020
ggaagaaaga	aaggatgaga	gggaagggaag	aatcagagta	ttagggtagt	taacttacac	1080
atttgcattc	ttagtttaac	tgcaagtggg	gtaactacgt	ttttcaatga	tcgcatttga	1140
aacataagtc	ctattatacc	attaagttcc	tattatgcag	caattatata	ataaaaagta	1200
ctgcccgaag	tatagtaatt	tgggggtgtc	ctgagacact	aaaagatttg	agagggagaa	1260
tttcaaactt	aaagccactt	ttgggggggt	ttataactta	actgaaaaat	taatgcttca	1320
tcataacatt	taagctatat	ctagaaaagta	gactggagaa	ctg		1363

<210> 5389
 <211> 5878
 <212> DNA
 <213> Homo sapiens

<400> 5389						
cacgttgtca	tatagcagaa	tcagatatga	acttcagctc	gtctgactcc	aatgtcagtg	60
ctttccccga	tgcacctggc	taccttttga	ttattgtcaa	gatcctggaa	gacacaaatt	120
agattttgat	ttaatctttt	ccatttcttt	ccagctccaa	gtacagccca	gtatggaatt	180
accgggagcg	ctgatgttct	tttctcctgc	tggtagcttg	tggtgacact	gtcctctttc	240
accagcatat	tctacctgaa	gaatgccatt	ctacaataaa	ttcaaagacc	cataaaaggc	300
ttttaaggat	tctctgaaag	tgctgatggc	tggatccaat	ctggtacagt	ttgttaaaag	360
cagcgtggga	tataatcagc	agtgcctaca	tggggatgat	cgccttctgt	agaattgctc	420
attatgtaaa	tactttaatt	ctactctttt	ttgattagct	acattacctt	gtgaagcagt	480
acacattgtc	ctttttttta	gacgtgaaag	ctctgaaatt	acttttagag	gatatttaatt	540

gtgatttcat	gtttgtaatc	tacaactttt	caaaagcatt	cagtcattggt	ctgctagggt	600
gcaggctgta	gtttacaaaa	acgaatattg	cagtgaatat	gtgattcttt	aaggctgcaa	660
tacaagcatt	cagttccctg	tttcaataag	agtcaatcca	catttacaaa	gatgcatttt	720
tttctttttt	gataaaaaag	caaataatat	tgccttcaga	ttatttcttc	aaaatataac	780
acatatctag	atttttctgc	tcgcatgata	ttcagggttc	aggaatgagc	cttgtaatat	840
aactggctgt	gcagctctgc	ttctctttcc	tgtaagttca	gcattgggtgt	gccttcatac	900
aataatat	ttctctttgt	ctccaactaa	tataaaatgt	tttgctaaat	cttacaattt	960
gaaagtaaaa	ataaaccaga	gtgatcaagt	taaaccatac	actatctcta	agtaacgaag	1020
gagctattgg	actgtaaaaa	tctcttctct	cactgacaat	gggggttgag	aattttgccc	1080
cacactaact	cagttcttgt	gatgagagac	aatttaataa	cagtatagta	aatataccat	1140
atgatttctt	tagttgtagc	taaatgttag	atccaccgtg	ggaaatcatt	ccctttaaaa	1200
tgacagcaca	gtccactcaa	aggattgcct	agcaatacag	catcttttcc	tttcactagt	1260
ccaagccaaa	aattttaaga	tgatttgtca	gaaagggcac	aaagtcctat	cacctaatat	1320
tacaagagtt	ggtaagcgct	catcattaat	tttattttgt	ggcagctaag	ttagtatgac	1380
agaggcagtg	ctcctgtgga	caggagcatt	ttgcatattt	tccatctgaa	agtatcactc	1440
agttgatagt	ctggaatgca	tgttatatat	tttaaaactt	ccaaaatata	ttataacaaa	1500
cattctatat	cggtagtag	cagaccaatc	tctaaaatag	ctaattcttc	aataaaatct	1560
ttctatatag	ccatttcagt	gcaaacaagt	aaaatcaaaa	aagaccatcc	tttatttttc	1620
cttacatgat	atatgtaaga	tgcatcaaaa	taaagacaaa	acaccagtga	tgagaatatc	1680
ttaagataag	taattatcaa	attattgtga	atgttaaatt	atttctacta	taaagaagca	1740
aaactacatt	tttgaaggaa	aatgctgtta	ctctaacatt	aatttacagg	aatagtttga	1800
tggtttcact	ctttactaaa	gaaaggccat	caccttgaaa	gccattttac	aggtttgatg	1860
aagttaccaa	tttcagtaca	cctaaaattc	tacaaatagt	ccccttttac	aagttgtaac	1920
aacaaagacc	ctataataaa	attagataga	agaaattttg	cagtggttat	acatatttga	1980
gatatctagt	atgttgcctt	agcagggatg	gcttaaaaaa	tgtgattttt	tttcttcaag	2040
taaaacttag	tcccaaagta	catcataaat	caattttaat	tagaaaaatg	aatcttaaat	2100
gaggggacat	aagtatactc	tttccacaaa	atggcaataa	taaggcataa	agctagtaaa	2160
tctactaact	gtaataaatg	tatgacatta	ttttgattga	tacattaaaa	aagagttttt	2220
agaacaaata	tggcatttaa	ctttattatt	tatttgcttt	taagaaatat	tctttgtgga	2280
attgttgaat	aaactataaa	atattatttt	gtattgcagc	tttaaagtgg	cacactccat	2340
aataatctac	ttactagaaa	tagtgggtgct	accacaaaaa	atgttaacca	tcagtaccat	2400
tgtttgggag	aaagaaacag	atcaagaatg	catattattc	agtgaccgct	ttcctagagt	2460
taaaatacct	cctcttttga	aggtttgtag	gtaaattgag	gtataaacta	tggatgaacc	2520
aaataaattg	ttcaaagtgt	tgtcatgtat	ccaaatttgt	ggagtctggt	gtttttacca	2580
tagaatgtga	cagaagtaca	gtcatagctc	agtagctata	tgtatttgcc	tttatgttag	2640
aagagacttt	cttgagtgc	atttttaaat	agaggaggta	ttcactatgt	ttttctgtat	2700
cacagcagca	ttcctagtc	ttaggccctc	ggacagagt	aaatcatgag	tatttatgag	2760
ttcaatattg	tcaaataagg	ctacagtatt	tgcttttttg	tgtgaatgta	ttgcatataa	2820
tgttcaagta	gatgatttta	catttatgga	catataaaat	gtctgattac	cccattttat	2880
cagtcctgac	tgtacaagat	tgttgcaatt	tcagaatagc	agttttataa	attgattttat	2940
cttttaattc	ataacaattt	gtgttagctg	ttcattttcag	gatttatatt	tctacaagtt	3000
ccacttgtgt	gactcctttt	gttgccccta	ttttttttta	aagaagggaag	aaagaaaaat	3060
aagtagcagt	ttaaaaatga	gaatggagag	aaaagaaaaa	gaatgaaaag	gaaaggcagt	3120
aaagagggaa	aaaaagggaag	gatgggaagg	atgaagggaag	gaagggagga	aggggagaag	3180
gtaggaagaa	agaaaggatg	agagggaagg	aagaatcaga	gtattagggt	agttaactta	3240
cacatttgca	ttcttagttt	aactgcaagt	ggtgtaacta	cgttttttcaa	tgatcgcat	3300
tgaacataaa	gtcctattat	accattaagt	tcctattatg	cagcaattat	ataataaaaa	3360
gtactgcca	agttatagta	atgtgggtgt	ttttgagaca	ctaaaagatt	tgagaggggag	3420
aatttcaaac	ttaaagccac	ttttgggggg	tttataactt	aactgaaaaa	ttaatgcttc	3480
atcataacat	ttaaagtata	tctagaaagt	agactggaga	actgagaaaa	ttaccagggt	3540
aattcaggga	aaaaaaaaaa	tatatatata	tataaatacc	cctacatttg	aagtcagaaa	3600
actctgaaaa	actgaattat	caaagtcaat	catctataat	gatcaaat	actgaacaat	3660
tgtaaattta	tccattgtgc	ttagctttgt	gacacagcca	aaagttacct	atttaattct	3720
ttcaataaaa	attgtttttt	gaaatccaga	aatgatttaa	aaagagggtca	ggtttttaac	3780
tattttattga	agtatgtgga	tgtacagtat	ttcaatagat	atgaatatga	ataaatggta	3840
tgctttaaaga	ttctttgaat	atgtattttac	tttaaagact	ggaaaaagct	cttcctgtct	3900
tttagtaaaa	catccatatt	tcataaacctg	atgtaaaata	tgttgtactg	tttccaatag	3960
gtgaatataa	actcagttta	tcaattaaaa	tatgtatttg	actcatttta	aaactctatt	4020
agcttaagag	aaagaaggaa	gaaataataa	tttgaagata	tttctgctat	tctctttatt	4080
tctgtattta	cactcatctt	tctgcttact	ctaaagcagt	acagggtaaa	aattctagat	4140
gctacagttt	caaatgactc	cacactatat	tctttcttgc	tgttgctgat	tcctaaaagg	4200

tttgatgagc	tgaactacat	ctaaactaaa	aataaatttt	ctggaaacat	tttattatta	4260
attatattaga	acctttacct	ggtaaaatac	agcagagtta	gcaacagaga	ctaaatatcc	4320
tggtgataaa	atcctgatga	tcttacaggc	taaacaactg	aaaactcaaa	cgcttgtaag	4380
agccaggcag	agtgtaat	cttaacagct	gggtataaaa	caacgggcac	ctgaagggtat	4440
tcagatacaa	tttccttaaa	aataccttgg	tttccaagca	aaacacgtta	tttggtgag	4500
aacctttagt	ttgtaaatac	caaaccataa	tatacaaagt	agatctcaag	ccaaatgaat	4560
tttttaagcc	ctctttccca	tatctgttca	tctatgatag	tcaactgaat	aaatgagaac	4620
aatgtgatag	ataaaacaac	aaagcataaa	aaagattcat	gcttggtttt	ataagctatt	4680
ttgaaatata	agtatcattg	ctattctgag	aaatctatat	acaccaaaagc	cctccctcca	4740
caaaaaaact	ggaaatgttc	taataaatgt	ctgatttccc	ccacagcttc	attatttctt	4800
cccttttcaa	catctatctt	atctatcttg	cataaattac	atcacagaaa	cagaaacatc	4860
aagtatcaga	catggaaaac	cagcacatga	aacagagcta	gtttccctct	caaaagaata	4920
gggcaaaaca	tagatgcttc	aaaatcatat	cttggtatac	agaaaataat	tattcacttt	4980
aacctgacag	tcagaaatgt	aagtaagaat	ttgtagagat	aattttccaa	ggtaattcat	5040
tcaagttagt	ggaatttgat	ccaaacaccc	gtcaatgtac	tccctctgaa	ctttccaaga	5100
atcatacacc	ttcacattta	cattcactgt	ttttctagta	attccaaact	tactcaaaag	5160
tatttcagaa	ttgatatcac	tgggtggaaa	agagcaattt	agcaaacaaa	tacatgcttt	5220
ccggtattcc	tagagaaaag	gaaaagagga	atacgtctca	ttcttctccc	tagaagctct	5280
acccacagtc	atcctaaagc	tagaccaatc	tctcccaggg	ctttccttca	gtctaagaaa	5340
catgcttcat	ttcagagaca	attgtggcaa	ctatagtttt	ccccaaaggg	tcacaactac	5400
ctctcctttg	cattttacaa	tggagcactt	ttgcaagcgt	tgctattgtg	gctttctcaa	5460
cactttcaaa	tacttaaagg	agaaaatatt	actattgtca	tgtattgatg	gtgaaaacga	5520
gattcagaaa	ttttgagtca	cttgctgaag	attatacttc	aactaagtgg	cagatctgag	5580
ccaaatatgc	aatgaaaaat	gttcccaatt	tgttccagtc	cccagactac	ctaggaaaaa	5640
gaaaagcata	taatcacatt	gctagcttca	tagacaacta	tttgcatatt	tttatttata	5700
tattttatata	aatataagca	catttttaaat	ataaatatag	atattttatga	catccttgta	5760
ttttccaata	cctgcagagg	gtatgagatt	taaaggctaa	tcagattgta	catgtcatct	5820
aaaacttttg	aaacgtgaaa	ctcacagtac	agttgccttt	ggacacacag	ccttgggt	5878

<210> 5390
 <211> 1465
 <212> DNA
 <213> Homo sapiens

<400> 5390						
cacgagggag	atcagtgtga	agggcattgc	caaagtggaa	tcagtaaggc	ttggcagttg	60
accttggttg	ttggagagaa	gggataagat	tttaaagcta	catgtctgaa	agaatgatgc	120
tgctgattga	aataaaggaa	gaaaggatgc	atttcgggct	ccaacctgtc	ctaggaaggc	180
ctagacctca	aacaccatca	cctccatgca	tttctctctt	ggctactatg	tcttttccct	240
gacttctgcc	tctccagctc	tctgggctgc	tgcttccacc	tgttcatctg	acttagacct	300
tccttgctgg	gtccttggtc	acctactcat	ttgggtgctc	gtctgccatc	agtacctcca	360
ttgcagctgg	tgggagtcca	gtcaccatct	cttatatttg	cttcccacta	gaaagatcaa	420
gagaagttat	ttctttccct	tgcgctccaa	tttttctcta	gacagttggt	atccacaatt	480
ttaaaaaatg	ttccatgttg	tataaacaag	cattcgctga	gaggggctgt	taatacacat	540
cgtgcccctt	ttataaaaaat	tcatgcatgg	aatcctacat	tattatgcat	caaaatctcc	600
agaaatgtct	taggattttt	gcagggagaa	tattaaatgc	attgttttgc	tttggttttga	660
agagactaga	tgtgcagagg	aagagagggtg	gcatgggtgg	agggtacatt	tgagttgtca	720
acagtctctg	cagtgtcagg	tcaattacat	cagcacttgg	actggaccag	ggaaaggaat	780
gattctgctt	cctgggaatg	tcagaaggac	ctgatgatta	tatttggcaa	agccaggagg	840
agtggctttg	aatgtcattg	ctaagaatta	cactttgagt	agcatttctg	gatgtctgag	900
cttttcaaat	gatacttctt	ttctgctgtg	gctttccctt	ctggtggact	ggttcccaga	960
gggtcctctt	gtttgtcctt	gccctcgctt	ttatatcagt	tcatgttttc	tcttctgtca	1020
tcttcttctc	cagcgtgtgt	tctccacccc	ctcctgctgc	actcacaaca	gcttcccctc	1080
tcctgttttag	aggtggaagc	atgtaagaat	gcgtttgagg	gggatgcttg	ccaaaggaca	1140
gcatattcaa	catctggtat	caacaaggta	atgtttaacc	ttagactagc	caaactagtg	1200
atgacctgct	tccatgctgc	atctgctgct	ttttgtgttg	atgggactca	gaaatcatga	1260
gaaaggctct	cagtgatcca	tgactgcaac	aaattctttt	cctaattgtg	ccgtatatta	1320
tgcccctcaa	tacaacttac	taatctctgc	ctcagtttct	ccatctgtga	aagtgggtga	1380
atacttatct	acctcccttg	aatggtgtga	agattagtat	atggtggtaa	agcactttta	1440
aaataaagaa	tgatataaag	cattg				1465

